WILD BIODIVERSITY OF TAMILNADU

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Tamil Nadu Forest Department
Panagal Building, Saidapet,
Chennai - 600 015.

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PREFACE

Tamil Nadu is endowed with a wide variety of eco-systems, right from marine coastal systems in the Gulf of Mannar to terrestrial evergreen forests in the Western Ghats. It is a paradise on earth for nature conservationists to explore. Tamil Nadu has 26 Protected Areas harbouring a variety of flora and fauna which ranges from the tender and cute looking Slender lorris to mighty and magestic animals like elephant and tiger, not to speak of several fascinating mammalian, avian, reptilian and aquatic species.

The aim of this booklet is to provide basic information about our protected areas and the flora and fauna they harbour and thereby arouse interest in the general public, students, tourists, scientists and all those interested in conservation of natural resources.

C.K.Sreedharan, IFS
Principal Chief Conservator of Forests &
Chief Wildlife Warden

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C.K.Sreedharan, IFS
Principal Chief Conservator of Forests &
Chief Wildlife Warden

TAMIL NADU
SANCTUARIES AND NATIONAL PARK
N
1:1,000,000
PULICAT
THIRUVALLUR
CHENNAI
GUINDY NP
VELLORE
KANCHEEPURAM
KARIKILI
VEDANTHANGAL
KRISHNAGIRI
THIRUVANNAMALAI
DHARMAPURI
VILLUPURAM
PONDICHERRY
SALEM
CUDDALORE
MUDUMALAI NATIONAL PARK AND SANCTUARY
NILGIRIS
MUKURTHI NP
ERODE
VELLODE
NAMMAKKAL
PERAMBALUR
KARAIVETTI
COIMBATORE
KARUR
TIRUCHIRAPPALLI
THANJAVUR
KARAIKKAL
THIRUVARUR
VADUVUR
NAGAPATTINAM
UDAYAMARTHANDAPURAM
DINDIGUL
PUDUKOTTAI
POINT CALIMERE SANCTUARY
VETTANGUDI
THENI
MADURAI
SIVAGANGAI
GRIZZLED GIANT SQUIRREL SANCTUARY
VIRUDHUNAGAR
RAMANATHAPURAM
KANJIRANKULAM
CHITRANKUDI
MEL - KEELSELVANUR
GULF OF MANNAR MARINE NP
TIRUNELVELI
THOOTHUKUDI
VALLANADU
KMTR
THIRUPUDAI MARUTHUR CR
KOONTHANKULAM-KADANKULAM
KANYAKUMARI SANCTUARY
KANYAKUMARI
LEGEND
SALEM DISTRICT BOUNDARY
BOUNDARY OF SANCTUARY / NP / BS
GEOMATICS CENTRE
TAMILNADU FOREST DEPARTMENT
CHENNAI - 15.

WILD BIODIVERSITY OF TAMIL NADU

INTRODUCTION

Geography

Tamil Nadu is situated at the South Eastern extremity of the Indian Peninsula and it is the Southern most State of mainland India. It is located between 8° 05' and 13° 34' North latitudes and 76° 14' and 80° 21' East longitudes. Andhra Pradesh in the North, Karnataka in the North West, Kerala on the West, Bay of Bengal in the East and Indian Ocean in the South bound it. With a coast line of 922 KM and land boundary of 1200 KM, the total area of the State is 1,30,19,000 ha. Chennai is the capital.

Forests

One sixth of landmass of Tamil Nadu is covered with forests. According to State of Forest Report 2003 by the Forest Survey of India, the total forest cover of the State is 22643 KM^2 constituting 17.41% of geographic area. This includes 2440 KM^2 of very dense forest, 9567 KM^2 of moderately dense forest and 10636 KM^2 of open forest. Tamil Nadu ranks 11^{th} among the Indian States and Union Territories with reference to total forest cover. The recorded forest area of the state is 22,877 KM^2 constituting 17.59% of the geographic area. Tamil Nadu ranks 13^{th} among the Indian States and Union Territories with reference to total recorded forest area.

Protected Areas

The protected area of the Country is 1,56,006 KM^2 constituting 4.75% of the geographic area and 20.03% of the recorded forest area. The protected areas of Tamil Nadu extend to 3305 KM^2 constituting 2.54% of the geographic area and 15% of the recorded forest area. Tamil Nadu ranks 14^{th} among all the States and Union Territories of India in terms of protected area. There are 8 wildlife sanctuaries over 2,82,685.57 ha and 12 bird sanctuaries over 17,074.59 ha,5 National Parks over 30784.23 ha, 1 Tiger Reserve, 3 Elephant Reserves and 3 Biosphere Reserves for *in situ* conservation of wild fauna and flora. There is one Conservation Reserve in Tamil Nadu. National Wildlife Action Plan 2002-16 (Page-10) states that " we should aim to bring 10% of India's land mass under the PA network, of which at least half should be inviolate habitats". Tamil Nadu Forest Department is striving to achieve this major objective.

Floral diversity

The Angiosperm diversity of India includes 17,672 species. With 5640 species, Tamil Nadu ranks 1^{st} among all the States in the Country. This includes 533 endemic species, 230 red-listed species, 1559 species of medicinal plants and 260 species of wild relatives of cultivated plant. The Gymnosperm diversity of the country is 64 species of which Tamil Nadu has 4 species of indigenous Gymnosperms and about 60 introduced species. The Pteridophytes diversity of India includes 1022 species of which Tamil Nadu has about 184 species. Tamil Nadu wild plant diversity also includes vast number of Bryophytes, Likens, Fungi, Algae and Bacteria.

Faunal diversity

The faunal diversity of Tamil Nadu includes 165 species of fresh water Pisces, 76 species of Amphibians, 177 species of reptiles, 454 species of birds and 187 species of mammals. According to the CAMP reports the red-listed species include 126 species of Pisces, 56 species of Amphibians, 77 species of reptiles, 32 species of birds and 40 species of mammals. The endemic fauna includes 36 species of Amphibians, 63 species of reptiles, 17 species of birds and 24 species of mammals. Schedule I animals include 22 species of mammals, 42 species of birds and 9 species of reptiles. Schedule II animals include 13 species of mammals. Schedule III animals include 5 species of mammals. Schedule IV animals include 5 species of mammals, 367 species of birds, 109 species of reptiles and 23 species of Amphibians. Schedule V animals include 13 species of mammals and 1 species of birds.

UNREALISED AND UNTRODDEN PARADISE ON EARTH

All uncultivated flora and wild fauna are classified as wildlife. Wildlife is also defined as any animal specified in Schedule I to IV of Wildlife (Protection) Act, 1972 and found wild in nature. Protected Area (PA) means a National Park, a Sanctuary, Conservation Reserve or Community Reserve, notified under Section 18, 35, 36A and 36C of the Wildlife (Protection) Act, 1972. A network of scientifically managed protected areas have been set up all over India as per the objectives of 1983 National Wildlife Action Plan. Over 500 Protected Areas have been set up all over India. Tamil Nadu has 26 Protected Areas, which are unrealised and untrodden paradise on planet earth.

OBJECTIVES OF CONSERVATION AND MANAGEMENT

Wildlife and wildlife habitats which are products of millions of years of evolution should be conserved and sustainably managed to meet the social, economic, ecological, cultural, recreational and spiritual needs of the present and future generations. Water, wilderness and wildlife are intimately and irrevocably linked. Wilderness areas and particularly forests which are the repository of wildlife and biodiversity have either shrunk or disappeared due to severe agricultural, natural and domestic pressures. Natural processes, forests and other wildlife habitat recharge aquifiers, maintain water regime and moderate impacts of floods, droughts and cyclones and thereby they ensure food security and regulate climate change. They are also source of food, fodder, fuel and other products supplementing the sustenance of local communities. Conservation of biodiversity is directly linked with conservation of eco-systems and thus ensure water and food security. The ecological security of the State as a whole and economic well being of the people nearby through water and food security can only be achieved by conserving our biodiversity in perpetuity without any reservation.

Forests and the wilderness areas in Tamil Nadu are the treasure-house for multitude of biodiversity beyond our imagination. They are also the repository and virtual pharmaceutical factories of an array of medicinal plants. These areas form the best underground water tank holding volumes of precious pure water which are released gradually into the streams, rivers and wells down below. They form the carbon sink, sucking and storing the lethal carbon-di-oxide for the benefit of all living things. They are the most natural lungs providing the vital oxygen for all the living things to breathe and survive.

STRATEGIES ADOPTED

- Provide absolute protection of the area from all factors causing degradation, depletion and destruction of wildlife and wildlife habitats by strict enforcement of the Wildlife (Protection) Act, 1972 and Tamil Nadu Forest Act, 1882.
- Eco-development works in and around protected areas to provide the essential benefits to the occupants of enclosures and villages respectively to ensure their support and willing participation in wildlife conservation.
- Encourage appropriate monitoring and research works to develop programmes and plans and thereby tackle the identified problems.
- Facilitate education and awareness creation, facilities for the benefit of all sections of population especially students. Create awareness on the need to conserve our natural bio-resources through various mass media and other means.
- Take fire prevention and control measures in and around Sanctuaries through specific programmes.
- Take habitat restoration and improvement measures wherever necessary.
- Relocation of human settlements from Protected Areas.
- Prevention of outbreak of contagious diseases among wild animals by taking prophylactic measures among domestic animals entering Sanctuaries and National Parks.
- Develop ex situ conservation centres like Zoological Parks and gene gardens, etc.
- Creation of Education and Interpretation Centres.
- Construction of crop protection structures like fences, trenches and walls, etc.
- Identification of restoration of corridors to facilitate free movement of animals between and around Protected Areas.
- Settle adequate compensation to the persons for death or damage caused by wild animals.
- Restriction and regulation for pollution causing industries and activities in a radius of 15 KMs. around the protected areas as per the Environment Protection Act.
- Integrate the Wildlife Protected Areas on a watershed or landscape basis with other sectors like Rural Development, Animal Husbandry, etc. for the sustained conservation and development of the area.
- Rescue and rehabilitation of strayed wild animals.
- Driving the wild animals back into the forest wherever they cause damage to humans, their property or crops.
- Ensure that each and every Protected Area has a Management Plan in place.
- Conserve the medicinal plants in the protected area by creation and management of Medicinal Plants Conservation Area (MPCAs).
- Tourism demands are subservient to conservation and to the interest of the protected area and therefore wildlife tourism exists for the Parks and not Parks for tourism.

Ex-situ Conservation Centres

The Vandalur Arignar Anna Zoological Park is doing yeomen service for the cause of wildlife recreation, education, conservation and research. Even though strictly it does not come within the purview of Protected Areas, it has been consciously included under this guideline for the benefit of those interested in wildlife conservation.

Conclusion

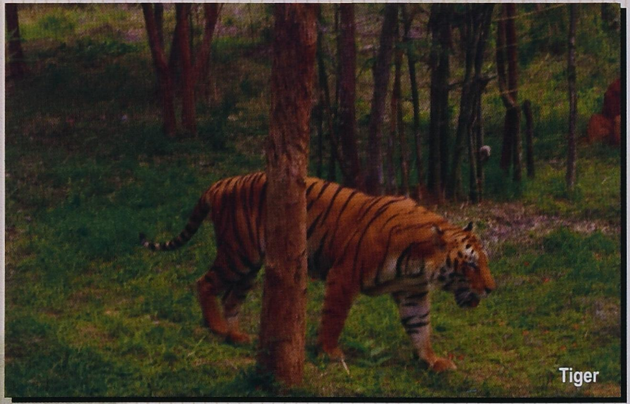
The Protected Areas of Tamil Nadu have the immense potential to arouse the senses, humans are endowed with - be it visual, auditory, olfactory, tactile or oral taste. The sensory experience one enjoys are unique in more than one way that it lingers on in the mind of persons through out his life in perpetuity.

Even though traditionally we have respected and revered and conserved our natural wealth and biodiversity, they have come under severe threat recently due to various anthropogenic causes. Degradation of forests, the habitats of wildlife, fragmentation, overgrazing by domestic cattle, forest fires, poaching and killing of animals due to man-animal conflict are the main threats our wildlife population in Tamil Nadu facing today. People's involvement and support is absolutely essential to make the wildlife conservation a success in our State. Let us understand the need to conserve our natural heritage and make all people conscious to conserve and sustainably manage them for the benefit of present and future well being of the mankind. Man-animal conflict due to clash of interest is taking a serious and mammoth proportion in and around our protected areas and needs special attention and care of all concerned.

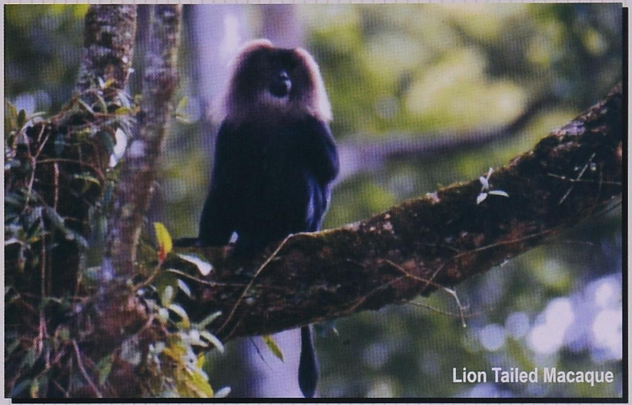
C.K.Sreedharan, PCCF & CWLW
Dr. R. Annamalai, CCF(P&V)

Introduction

KMTR, the only Tiger Reserve in Tamil Nadu and 17th in India was declared as Tiger Reserve in 1988. This includes two adjoining Sanctuaries namely Kalakad Sanctuary and Mundanthurai Sanctuary and also part of Kanyakumari Sanctuary. Its conservation history dates back to 1962 when Mundanthurai was declared as the nation's first 'Tiger Sanctuary' through a Tamil Nadu Government Notification (G.O.No. 2556 Food and Agricultural Department dated 02.08.1962). This was almost ten years before Project Tiger was launched. Kalakad on the other hand was declared as Sanctuary in 1976 after studies by noted biologist, Stephen Green on the critically endangered Lion Tailed Macaque, (G.O.Ms.No. 183 Forests and Fisheries dated 6th March 1976). Kanyakumari Sanctuary was notified vide G.O.Ms.No. 156 Environment and Forests Department, dated : 16.07.2002.. The total area of the Tiger Reserve is 895 Sq.KMs. This Reserve has been identified as among the type-1 Tiger Conservation Units (TCU) representing the tropical moist evergreen forests worldwide.



Tiger



Lion Tailed Macaque

Location

KMTR is situated between latitudes 8° 25' North to 8° 53' North, between longitude 77° 10' East and 77° 35' East. It is located in the Southern Western Ghats. It also forms part of the interstate Agasthiyarmalai Biosphere Reserve. The altitude ranges from 40m above MSL to 1800 m above MSL. This Reserve receives rainfall from both the monsoons and the rainfall ranges from 750mm on the eastern outer slopes to 3500 mm. in the western higher reaches.

Access to the area

Airport

- Trivandrum Airport is 200 KMs. from Mundanthurai and 140KMs. from Kalakad.
- Madurai Airport is 200 KMs. from Mundanthurai and 210KMs. from Kalakad.

Railway station

- Tirunelveli is 50 KMs. from Mundanthurai and 45 KMs. from Kalakad.

Connecting roads

- This reserve has access by road to Thirukarangudi, Kalakad, Papanasam and Sivasailam which are 50 to 55 KMs. away from the District Headquarters Tirunelveli. Buses are plying to reach Mundanthurai and Upper Kodayar and these roads pass through the Tiger Reserve.

Important Tourist spots

Waterfalls

There are 3 important waterfalls, which attract lakhs of tourists every year. They are Agasthiyar Falls and Banatheertham Falls adjoining Karayar Dam in Mundanthurai Range and Manimuthar Falls in Ambasamudram Range.

Panatheertham Falls

Important Tourist spots

Waterfalls	-	There are 3 important waterfalls which attract lakhs of tourists every year. They are Agasthiyar Falls and Banatheerthum Falls adjoining Karayar Dam in Mundanthurai Range and Manimuthar Falls in Ambasamudram Range.
Religious Tourism	-	Religious Tourism - Sorimuthu lyyanar Koil in Mundanthurai Range, Nambi Koil in Thirukkarankudi Range and Golaknath Temple in Kadayam Range are very important from religious tourism point of view.
Other scenic spots	-	Thalaiyani in Kalakad Range, Karayar Dam and Servalar Dam in Mundanthurai Range, Kodmadi and Kannikatti Forest in Mundanthurai Range, Sengaltheri in Kalakad Range, BBTC Tea Estates and Muthukuzhivayal in Upper Kodayar Range are important scenic spots.

Important trekking routes

Route	Distance (in KMs)	Route	Distance (in KMs)
Thalayani to Karungalkasam	6.0	Netterikal to Naraikadu	8.0
Karungalkasam to Mudaliruppan	7.5	Naraikadu to Nambikoil	14.0
Mudaliruppan cross to Moolakasam	7.0	Kannikatty to Pandipathu`	24.0
Moolakasam to Kakachi	15.0	Mundanthurai to Vazhayar	24.0
Kakachi to Sengaltheri	14.0	Servalar to Karayar	4.0
Sengaltheri to Netterikal	14.0	Sengaltheri to Moolakasam	10.0

(* Trekking is possible only with the permission of the Field Director)

Watersheds

KMTR has 3 major watershed areas; Upper Kodayar, Manimuthar and Tamirabarani. Upper Kodayar plateau, which receives around 5000 mm of rainfall, constitutes the watershed are for Kodayar river which flows towards the south-west. The reservoir on this plateau is the chief source of hydroelectric power generation for the region and also irrigates a part of Kanyakumari District. On the eastern side, Manimuthar River which originates from northeastern slope of upper Kodayar plateau, is joined by major tributaries like Kusangaliar, Kilmanimuthar, Kandamparai, and Chilambur odai. The dams across Manimuthar along the eastern border of the Reserve support the irrigation system around Ambasamudram. Manimuthar joins Tamirabarani near Vairavikulam.

Taminabarani River, the life of Tirunelveli and Tutircorin Districts of Tamil Nadu originates from the eastern valleys of Agasthiyamalai (Periyapothigai) Range. Several tributaries like Kuraiar, Kavatalaiar, Vanar, Kuduparalar and Servalar, which arise from the complex hill system around Mundanthurai plateau, are the major source of Tamirabarani River. The Hope Lake and Servalar reservoirs built across this river system are used for hydroelectric power generation and for irrigating lands around Ambasamudram.

The next affluent is the Varahanathi which brings down the waters of the Ramanathi and Jambunathi, both having their sources in the hills above Malakadayam. The Kadananathi into which flows the waters of Kallar and Karunaiar from the Sivasailam hills, joins the Varahanathi near Pappankulam and then flows into Tamirabarani.

The other river system of the Tiger Reserve are Elumichaiar, Vandala Odai, Pachaiar, Narkadayar, Nambiyar, Kodumudiyar.

Biodiversity

Western Ghats is one of the 25 global hotspots and one of the 3 mega centres of endemism in India. Agasthiyarmalai which

Tropical wet evergreen forests Sengaltheri

Forest types of KMTR

Type Code	Forest Type	Area (Sq.KMs)
1. 1A/C3	Southern Hilltop Evergreen Forests	33
2. 1A/C4	West coast Tropical Wet Evergreen Forests	261
3. 2A/C3	Tirunelveli Semi Evergreen Forests	30
4. 3B/C2	Southern Moist Mixed Deciduous Forests	42
5. 4F/RSI	Tropical Riparian Fringing Forests	82
6. 5A/C1(b)	Dry Teak Forests	67
7. 5A/C3	Southern Dry Mixed Deciduous Forests	190
8. 6A/C2	Carnatic Umbrella Thorn Forests	30
9. 8A/E1	Ochlandra Reeds	83
10.	Southern Montane Wet Grass Land	34

Note : Water bodies cover 23 Sq.KMs and Tea estates 24 Sq.KMs

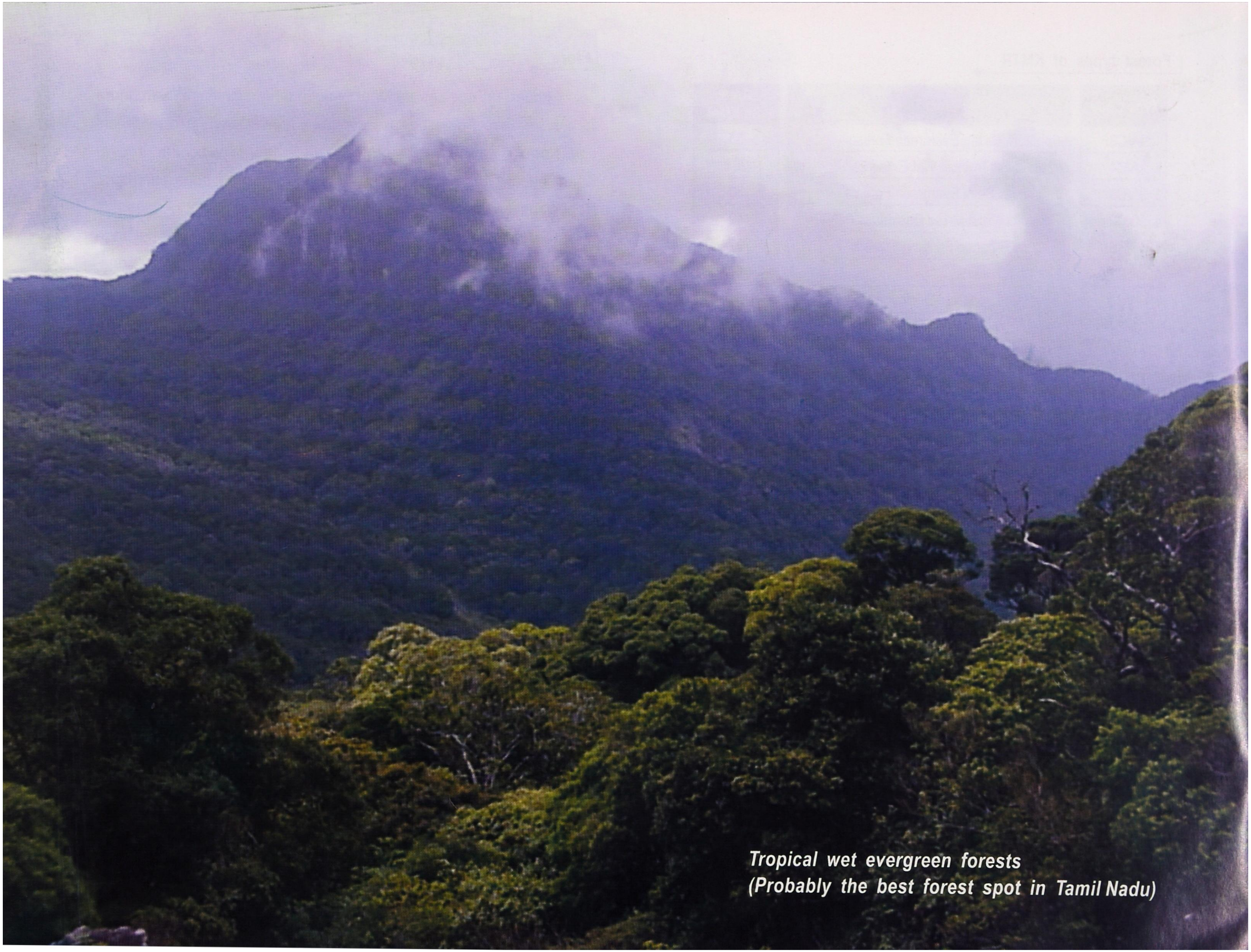
forms part of KMTR is one of the 5 centres of plant diversity and endemism in India (IUCN). Among all the Tiger Reserves in the country, KMTR is probably the richest from the biodiversity point of view. This is also described as 'Super hotspot' of Biodiversity.

The floral diversity includes 2,254 Angiosperms, which includes 448 endemic species, 58 Red - listed species, 601 Medicinal species and 90 species of wild relatives of the cultivated plants. There are 3 Gymnosperms and 156 Pteridophytes. The faunal diversity includes 47 species of fish, 47 species of amphibians, 89 species of reptiles, 337 species of Birds and 79 species of Mammals. The entire spectrum of biodiversity of KMTR has been documented in the book titled "*Biodiversity of Kalakad Mundanthurai Tiger Reserve*" by R. Annamalai and published by Tamil Nadu Forest Department. '*Current science' has brought out a special issue on KMTR (Volume 18, No.3, 10th February 2001).*

Flora

Important species include evolutionarily significant Sarcandra a vessel less Angiosperm, Paphiopedulum, druryi, a rare orchid and Nageia wallichiana a broad leaved and only conifer tree of South India. Other important tree species include Hopea parviflora, Hopea utilis, Calophylum elatum, Cullenia exarillata, Artocarpus hirsute, Syzygium sp., Cinnamomum zeylanicum, macaranga roxburghii, Mesua ferrea, Gluta travancorica, Canarium strictum, Veteria malabarica, Myristica species, Vitex altissima, Dysoxylm malabaricum, Anacolosa densiflora, Elaeodendron glacum, Eleocarpus tuberculatus, Alstonia scholaris, Mangifera indica, Decussocarpus wallichianus, Podocarpus latifolia, Eugenia species, Garcinia cambogia, Xanthophyllum flavescens, Felicium decipiens, Mallotus phillippinensis, Litsea species, Dalbergia latifolia, Kingiodendron pinnatum, Wrightia tinctoria, Chloroxylon suietenia, Pterocarpus marsupium, Anogeissus latifolia, Careya arborea, Emblica officinalis, Dalbergia paniculata, Albizia lebeck, Tectona grandis, Ficus spp., Hardwickia binata, Terminalia chebula, etc.

Monitor lizard



Tropical wet evergreen forests
(Probably the best forest spot in Tamil Nadu)

Racophorus malabaricus
(Recorded for the first time in KMTR by Dr. R. Annamalai)

Fauna

Fish

Glossogobius giuris, Mastacembelus armatus, Channa striatus, Channa orientalis, Etroplus maculatus, Etroplus suratensis, Oreichormis mossambica (Tilapia mossambica), Macrones vittatus (Macrone vittatus), Ompak bimaculatus (callichrous bimaculates), Heteropneutes fossilis (saccobranchus fossilis), Xenentodon cancila (Belone cancila), Aplocheilus lineatus (Haplochilus rubrostigma), H.lineatus synonym of Aplocheilus lineatus, Bhavania australis (Homaloptera brucei), Gara lissorhynchus (Discognathus modestus), Cyprinus carpio communis, Labeo funbriatus, L.calbasu, Cirrhina mrigala, Catla catla, Puntius sarana sarana (Barbus sarana), Gonoproktopterus dubius (B.dubius), B.carnaticus, Tor khudree (B.malabaricus), Puntius amphibius (B.amphibius), Puntius arulius (B.arulius), Puntius filamentosus (B.machecola), Punties sophore (B.stigma), Parluciosma daniconius (Rasbora daniconius), Danio aequipinnatus, Salmostoma sardinella (Chela untrahi), Nemacheilus pulchellus, Anguilla bengalensis.

Amphibians

Endemic species :

Bufo beddomii, Bufo microtympanum, Indirana beddomi, Indirana brachytarsus, Indirana diplostictus, Indirana leptodactylus, Limnonectes keralensis, Melanobatrachus indicus, Micrixalus fuscus, Micrixalus suxicola, Nyctbatrachus deccanensis, Nyctibatrachus aliceae, Nyctibatrachus beddomii, Nyctibatrachus major, Nyctibatrachus vasanthi, Philautus charius, Philautus glandulosus, Philautus pulcherimus, Philautus variabilis, Ramanella Montana, Rana aurantiaca, Rana curtipes, Rana malabarica, Rana temporalis, Rhacophorus calcadensis, Rhacophorus malabaricus, Uraeotyphlus malabaaricus.

NonEndemic species :

Bufo melanostictus, Bufo fergusoni, Euphlyctis cynophlictis, Hoplobatrachus tigerinus, Ichthyophis longicephalus, Ichthyophis,

Sloth Bear

Mongoose

sp-1, Ichthyophis sp-2, Limnonectes keralensis, Limnonectes limnocharis, Micrixalus opisthorhodus, Micrixalus silvaticus, Microhyla ornata1 Microhyla rubra, Phillatus beddomii, Phillatus nasutus, Polypedates maculatus, sRana brachytarsus, Tomopterna rolande, Uraeotyphlus oxyurus.

Reptiles

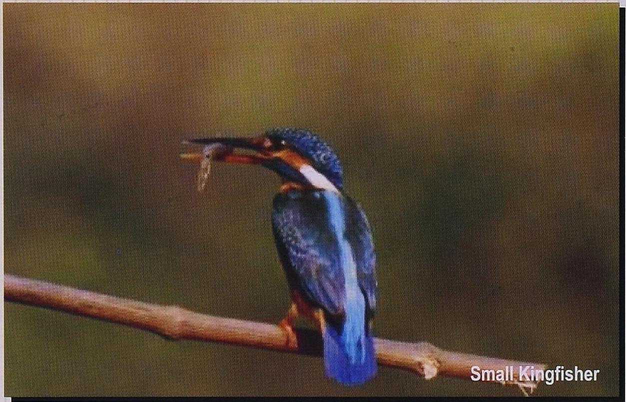
Endemic species :

Ahaetulla dispar, Ahaetulla perrotetti, Amphiesma beddomii, Brachipodium rhodogaster, Calliophis melanurus nigroscenes, Calotes adamanensis, Calotes ellioti, Calotes grandiquamis, Calotes nemoricola, Calotes rouxii, Calotes versicolor, Cnemaspis beddomei, Cnemaspsis indica, Cnemaspis ornatus, Dendrelaphis granddoculis, Draco dussumieri, Geoemyda silvatica, Hemidactylus anamallensis, Hemidactylus maculatus, Liopeltis calamaria, Lycodon travancoricus, Mabuya gansi, Melanochelys trijuga, Melanophodium punctatum, Oligodon brevicaudus, Otocryptis beddomii, Psammophilus dorsalis, Python molurus, Ristella beddomii, Scincella travancoricus, Teretrurus gramineus, Trimeresurus malabaricus, Trimeresurus strigatus, Uropeltis arcticeps, Uropeltis ellioti, Uropeltis liura, Uropeltis ocellatus, Varanus bengalensis.

Non endemic species :

Ahaetulla dispar, Ahaetulla nasutus, Ahaetulla pulverulenta, Amphiesma stolata, Atretium schistosum, Boiga ceylonensis, Boiga forsteni, Boiga trigonatus, Bungarus caeruleus, Calotes calotes, Chamaeleo zeylanicus, Chrysopelea ornate, Cnemaspis littoralis, Coluber mucosus, Crocodiles palustris, Cytodactylus dakanensis, Dasia halianus, Dendrelaphis tristis, Elaphe helena, Eryx conicus, Geochelone elegans, Hemidactylus brookii, Hemidactylus frenatus, Hemidactylus leschenaulti, Hemidactylus triedrus, Heosemys silvatica, Hypnale hypnale, Lycodon aulicus, Lygosoma punctatus, Mabuya beddomei, Mabuyacarinata, Mabuya macularicus, Macropisthodon plumbicolor, Naja naja, Oligodon ornensis, Oligodon taeniolatus, Ophiophagus hannah, Ophisops leschenaultii, Psammophilius blanfordanus, Ptyas conicus, Ptyas

Ant eater with baby



Small Kingfisher

mucous, Ramphotyphlops braminus, Riopa punctata, Sitana ponticeriana, Sphenomorphus dussumieri, Trimeresurus macrolepis, Typolops braminsee, Vipera russelii, Xenochropis piscator.

Birds

Grey Francolin, Rain Quail, Jungle Bush Quail, Small Buttonquail, Yellow-legged Button quail, Barred Button quail, Red Spurfowl, Painted Spurfowl, Grey Junglefowl, Indian Peafowl, Bar-headed Goose, Lesser Whistling-duck' Cotton Pygmy-goose, Spot-billed Duck, Northern Pintail, Eurasian Wryneck, Speckled Piculet, Rufous Woodpecker, White-bellied Woodpecker, Brown-capped Pygmy, Woodpecker, Lesser Yellownape, Streak-throated Woodpecker, Common Flameback, Black-rumped Flameback, Greater Flameback, Brown-headed Barbet Crimson-fronted Barbet, Coppersmith Barbet, Malabar Grey Hornbill, Great Hornbill, Common Hoopoe, Malabar Trogon, Indian Roller, Common Kingfisher, Oriental Dwarf Kingfisher, Stork-billed Kingfisher, White-throated Kingfisher, Black-capped Kingfisher, Pied Kingfisher, Green Bee-eater, Blue-tailed Bee-eater, Chestnut-headed Bee-eater, Pied Cuckoo, Chestnut-winged Cuckoo, Large Hawk Cuckoo, Indian Cuckoo, Lesser Cuckoo, Grey-bellied Cuckoo, Drongo Cuckoo, Asian Koel, Blue-faced Malkoha, Sirkeer Malkoha, Greater Coucal, Vernal Hanging Parrot, Rose-ringed Parakeet, Plum-headed Parakeet, Malabar Parakeet, Indian Swiftlet, White-rumped Needletail, Asian Palm Swift, House Swift, Fork-tailed Swift, Alpine Swift, Crested Treeswift, Oriental Bay Owl, Oriental Scops Owl, Eurasian Eagle Owl, Spot-bellied Eagle Owl, Brown Fish Owl, Brown Wood Owl, Jungle Owlet, Spotted Owlet, Brown Hawk, Owl, Sri Lanka Frogmouth, Grey Nightjar, Large-tailed Nightjar, Indian Nightjar, Rock Pigeon, Nilgiri Wood Pigeon, Mountain Imperial Pigeon, Laughing Dove, Spotted Dove, Eurasian Collared Dove, Emerald Dove, Pompadour Green Pigeon, Slaty-legged Crake, White-breasted Waterhen, Purple Swamphen, Common Moorhen, Common Coot, Snipe, Green Sandpiper, Eurasian Thick-Knee, Black-winged Stilt, Little Ringed Plover, Yellow-wattled Lapwing, Red-wattled Lapwing, River Tern, Whiskered

Latidens Salim ali (a critically endangered bat)

Slender loris

Tern, Osprey, Jerdon's Baza, Black Baza, Black-shouldered Kite, Black Kite, Brahminy Kite, Grey-headed Fish Eagle, Egyptian Vulture, Red-headed Vulture, Crested Serpent Eagle, Pallid Harrier, Crested Goshawk, Shikra, Besra, Eurasian Sparrowhawk, Oriental Honey-buzzard, Common Buzzard, Long-legged Buzzard, Tawny Eagle, Booted Eagle, Rufous-bellied Eagle, Changeable Hawk Eagle, Kestrel, Eurasian Hobby, Laggar Falcon, Little Grebe, Darter, Little Cormorant, Little Egret, Great Egret, Intermediate Egret, Cattle Egret, Indian Pond Heron, Grey Heron, Little Heron, Black-crowned Night Heron, Malayan Night Heron, Black Bittern, Glossy Ibis, Black-headed Ibis, Black Ibis, Eurasian Spoonbill, Spot-billed Pelican, Painted Stork, Asian Openbill, Indian Pitta, Asian Fairy Bluebird, Blue-winged Leafbird, Brown Shrike, Bay-backed Shrike, Rufous Treepie, White-bellied Treepie, House Crow, Large-billed Crow, Ashy Woodswallow, Eurasian Golden Oriole, Black-hooded Oriole, Large Cuckooshrike, Black headed Cuckooshrike, Small Minivet, Scarlet Minivet, Bar-winged Flycatchershrike, Black Drongo, Ashy Drongo, White-bellied Drongo, Bronzed Drongo, Greater Racket-tailed Drongo, Black-naped Monarch, Asian Paradise-Flycatcher, Common Iora, Large Woodshrike, Common Woodshrike, Blue Rock Thrush, Malabar Whistling Thrush, Pied Thrush, Orange-headed Thrush, Scaly Thrush, Eurasian Blackbird, White-bellied Shortwing, Asian Brown Flycatcher, Rusty-tailed Flycatcher, Brown-breasted Flycatcher, Red-throated Flycatcher, Black-and-orange Flycatcher, Verditer Flycatcher, Nilgiri Flycatcher, White-bellied Blue Flycatcher, Blue-throated Flycatcher, Tickell's Blue Flycatcher, Grey-headed Canary Flycatcher, Indian Blue Robin, Oriental Magpie Robin, Indian Robin, Black Redstrat, Pied Bushchat, Chestnut-tailed Starling, Brahminy Starling, Common Myna, Jungle Myna, Hill Myna, Velvet-fronted Nuthatch, Black-lored Tit, Eurasian Crag Martin, Dusky Crag Martin, Barn Swallow, Pacific Swallow, Wire-tailed Swallow, Red-tailed Swallow, Northern House Martin, Grey-headed Bulbul, Black-crested Bulbul, Red-whiskered Bulbul, Red-vented Bulbul, White-browed Bulbul, Yellow-browed Bulbul, Black Bulbul, Grey-breasted Prinia, Jungle Prinia, Ashy Prinia, Oriental White-eye, Grosshopper Warbler, Blyth's Reed Warbler,

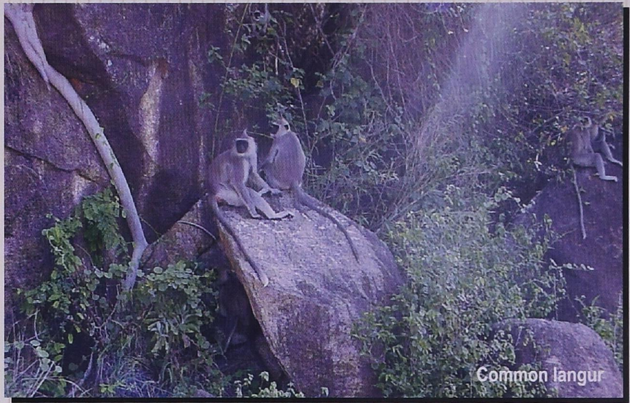
The Kani Tribe

Thick-billed Warbler, Broad-tailed Grassbird, Orphean Warbler, Common Tailorbird, Greenish Warbler, Large-billed Leaf Warbler, Western Crowned Warbler, Wynaad Laughingthrush, Grey-breasted Laughing-thrush, Puff-throated Babbler, Indian Scimitar Babbler, Tawny-bellied Babbler, Dark-fronted Babbler, Yellow-eyed Babbler, Rufous Babbler, Jungle Babbler, Yellow-billed Babbler, Brown-cheeked Fulvetta, Singing Bushlark, Indian Bushlark, Ashy-crowned Sparrow Lark, Eurasian Skylrak, Thick-billed Flowerpecker, Purple-rumped Sunbird, Crimson-backed Sunbird, Purple Sunbird, Loten's Sunbird, Little Spiderhunter, House Sparrow, Forest Wagtail, White Wagtail, White-browed Wagtail, Yellow Wagtail, Grey Wagtail, Nilgiri Pipit, Paddyfield Pipit, Baya Weaver, Indian Silverbill, White-rumped Munia, Black-throated Munia, Scaly-breasted Munia, Black-headed Munia, Common Rosefinch.

Mammals

The flagship species are Tiger, Asian Elephant and Lion tailed Macaque. The co-predators of Tiger include wild-dog or Indian Dhole and Leopard. Other species are : Madras hedgehog,

Butterfly


Common langur

Days' shrew, Grey musk shrew, Hill (mountain) shrew, Pygmy shrew, Fulvous fruit bat, Indian flying fox, Lesser dog-faced fruit bat, Short-nosed fruit bat, Lesser mouse-tailed bat, Black-beared tomb bat, Pouch-bearing bat, Greater false vampire, Lesser false vampire, Rufous horseshoe bat, Blyth's horseshoe bat, Lesser woolly horseshoe bat, Dusky leaf-nosed bat, Fulvous leaf-nosed bat, Schneider's leaf-nosed bat, Evening bat, Painted bat, Slender loris, Bonnet macaque, Lion-tailed macaque, Common langur, Nilgiri langur, Indian jackal, Bengal fox (from outside PA), Dhole or Asiatic wild dog, Sloth bear, Nilgiri marten, Common otter, Smooth coated otter, Oriental small clawed otter, Small Indian civet, Common palm civet, Jerdon's (brown) pawn civet, Common Indian mongoose, Brown mongoose, Ruddy mongoose, Stripe-necked mangoose, Leopard cat, Jungle cat, Rusty-spotted cat, Leopard, Tiger, Asian elephant, Wild boar, Indian spotted chevrotain or mouse deer, Barking deer, Chital, Sambar, Gaur, Nilgiri tahr, Indian pangolin, Common palm squirrel, Dusky striped squirrel, Jungle striped squirrel, Indian giant squirrel, Indian giant flying squirrel, Travancore flying squirrel, Malabar spiny

dormouse, Indian gerbil, Indian bush rat, Soft-furred field rat or metad, White-bellied wood rat, Indian field mouse, Bonhote's mouse, House mouse, Spiny field mouse, Indian long-tailed tree mouse, Lesser bandicoot rat, large bandicoot rat, Indian porcupine and hare.

Eco-Development

Eco-development project was implemented in KMTR from 1994 to 2001 with assistance from World Bank. The main objectives of the project are as follows:

i) To establish committed grass root level organizations concerned with conservation by educating, motivating and involving local people in the Eco-development villages.

(ii) To achieve reduction in resource dependency on forests of the Reserve and thus lead to habitat improvement and conservation. This is being achieved by providing alternate income generation activities to forest dependents in the community and improving their skills and knowledge for the new way of living; developing suitable biomass in and around the target villages (firewood, fodder, small timber and fruit trees) and encouraging reduced use of firewood, increasing the efficiency of energy use, motivating people to use alternate energy materials and methods.

(iii) To create awareness about the value of the Reserve and the need to conserve it among the target villages using different media (folkarts, audio-visual, posters and brochures).

(iv) To enhance the capacity among local people in needed skills and knowledge by way of organizing training courses, workshops and field visits.

Important impacts include formation of 182 Village Forest Councils covering all the villages bordering the eastern periphery of the reserve with 75% membership of the total population. It has resulted in reduction of 95% of headloads and about 96% of grazing there by leading to overall improvement in the habitat. Successful micro financing started with a seed grant of Rs.3 Crores have revolved to Rs.17 Crores. The mind set of the people have been completely changed towards conservation and a culture facilitating complete protection have been established. About 700 Self Help Groups formed are successfully championing the cause of conservation in the Tiger Reserve. (For further details on Eco-Development Book on Eco-Development in KMTR Status Report 2004 by R. Annamalai may be consulted.)

Forest Rest Houses

Mundanthurai, Kalakad (Sengaltheri) and Kuthiravotti

Tourist information

Best season of visiting December to March Tourist spots are open to visitors through out the year Sanctuary is closed during fire season April to July.

For details contact

Field Director & Conservator of Forests,
KMTR Project Tiger,
N.G.O. 'A' Colony, Tirunelveli 7 (TN) Phone : Office 0462 552663
E-mail kmtrpt@sancharnet.in Webhttp//www.kmtr.org

Sambar (Cervus unicolor)

The virgin forests of Kanyakumari District got transferred from Kerala to Tamil Nadu on the 1st November 1956 as a result of the state reorganization. Kanyakumari Forest Division came into existence from 1st April 1977, with the headquarters at Nagercoil. Government Reserved Forests occupy an area of 50486 ha, i.e., 30.2% of the total geographic area of the Kanyakumari District.

Location

Kanyakumari District is the southern most tip of India with Kerala on the north-west, Tirunelveli District in north-east, Arabian Sea in the south-west, Bay of Bengal in the South east and Indian Ocean in the south. Kanyakumari Forest Division is located between 77°10'-77°35' east longitude and 8°5' 8°35' north latitude

The highest point is 1829.4 m at the trijunction of Mahendragiri, Kalakad and Veerapuli Reserved Forests. Other important peaks are Mahendragiri (1645.2 M) in Mahendragiri RF, Mottaichi peak (1590.4 M) and Varaittumudi (1426.2 M) in Klamalai RF, The Golden Rock (1434.7 M) and Vanamuttimalai in Klamalai RFs. The valleys and flat lands between the spurs are accessible and contain valuable forests. At Muthukuzhivayal there is a plateau about 16 KM long and 10 KM wide, at an elevation of 1341 M.

Flora

The forests of this Division constitute the southern tip of the Western Ghats forests. Various types of Forests from luxuriant Tropical Wet Evergreen forests to Southern Thorn Scrub forests occur in this Division because of diverse locality factors (edaphic and biotic) varying rainfall from 50 to 310 cm and elevations from Sea level upto 1829 M.

1A/C3	Southern Hilltop Tropical Evergreen Forests
1A/C4	West Coast Tropical Evergreen Forests
2A/C2	West Coast Semi Evergreen Forests
3B/C1(b)	Moist Teak Forests
3B/C1(e)	Slightly Moist Teak Forests
3B/C2	Southern Moist Mixed Deciduous Forests
5a/C1(b)	Dry Teak Forests
5A/C3	Southern Dry Mixed Deciduous Forests
5/DS2	Dry Savannah Forests
6A/C2	Carnatic Umbrella thorn forests
6A/C1	Southern Thorn Forests
6A/Ds1	Southern Thorn Scrub
8A/C1	Southern Sub-tropical Hill Forests
8A/E1	Ochlandra Reed Brakes

Hill top Grasslands

Hilltop Grasslands are found in Veerapuli and Asambu Reserved Forests near Shola patches.

Endemism

In precipitous localities, bordering Tirunelveli District, especially around Upper Kodayar Bentinckia conddappana, known as Hill arecanut, an interesting endemic palm occurs. Along the depressions Arenga wightii and Poanaca docksonii, two other palms, are found in plenty. The former yields a highly intoxicating toddy, which is much sought after by tribals.

Reed Brakes

Ochlandra Reed Brakes (8A/E1) form an important and characteristic forest type occurring in Veerapuli RF.

Rare and endangered plant

In the Red Data Book, the Botanical Survey of India had categorized the present status of 427 Indian plants. Out of this, 123 species occur in Tamil Nadu, and as many as 62 species are endemic to Tamil Nadu 39 of these occur in the Western Ghats.

Fauna

Its number is also very much reduced by human interference by way of construction of hydel projects and large conversion of natural forests into rubber, plantation and encroachments and private estates. Poaching and poisoning have accounted for reduction in number of animals like Tiger, Panther, Elephant, Black Buck and Deer etc., Inspite of this a considerable variety of wildlife can be seen in this division as follows.

Asiatic Elephant (Elephas maximus)

Bonnet Macaque, Common Langur or Hanuman Langur, Nilgiri Langur, Slender Loris, Tiger, Leopard or Panther, Jungle Cat, Small Indian Civet, Mangoose, Jackal, Indian Fox, Dhole or Indian Wild Dog, Sloth Bear, Otter, Large Brown Flying Squirrel, Flying Fox, Indian Gaint Squirrel, Indian Porcupine, India Hare, Indian Elephant, Gaur or India Bison, Nilgiri Tahr, Chital or spoted Deer, Black Buck or Indian Antelope, Sambar, Barking Deer, Mousse Deer or India Chevrotain, Wild Boar, Pangolin.

Approach

Road : Nagerkoil / Kanyakumari is well connected by buses.

Railway : Nagerkoil / Kanyakumari is well connected by train.

Nearest airport is Trivandrum (67KM from Nagercoil)

Tourist info

The general climate of the district is pleasant. Both the south west and north east monsoon winds, the proximity of the sea and the dwindling heights of Western Ghats greatly influence the climate of this district. In Kanyakumari rainfall is distributed over four seasons. eg. (a) South west monsoon (Jun-Sep) 37.6% and 33.7 rainy days (b) north-east monsoon (Oct-Dec) 37.9% and 26.5 rainy days (c) Winter (Jan-Feb) 2.7% and 2.7 rainy days and (d) the hot wheather summer seasons 21.7% and 16.8 rainy days. In the hill region the rainfall is uniformly distributed in both monsoons and maximum rainfall occurs during October and November. On the whole this district gets an average annual rainfall of 1369.5mm with 79.7 rainy days.

Grizzled Squirrel (Ratufa macroura)

The Grizzled Squirrel Wildlife Sanctuary at Sirvilliputhur in southern Tamil Nadu, was declared as a sanctuary in December 1989. It spreads over 480 Sq.KM, This sanctuary is contiguous to Periyar Tiger Reserve on the South western side and the Megamalai Reserve Forest on the North western side. Its southern limit is contiguous with the Sivagiri Reserved Forest of Tirunelveli Forest Division.

This Grizzled Squirrel Wildlife Sanctuary lies mostly in Virdhunagar District and partly in Madurai District nestling in the high ranges of the Western Ghats. The altitude varies from 100 MSL to 2010 MSL. It receives both south west and north east monsoons. The varied climate and topographic conditions prevailing in the sanctuary present remarkable diversity both in Flora and Fauna.

Location

The sanctuary is located in the eastern slopes of the Western Ghats with a number of peaks reaching upto 1800 M . It is the eastern watershed boundary for the river Periyar and one of the best preserved forests south of the Palghat Gap.

The tributaries of the river Vaipaar and a few rivulets draining into the river Gundaar are originating in this hill tracts of the Sanctuary. The climate is generally hot and dry in the foothills. Hot tropical climate prevails in the upper elevations. The average annual rainfall ranges from 800 -2300 MM.

Flora

The sanctuary has a wide range of habitats - from the higher elevation Upper Montane forests and grasslands, mid elevation Wet Evergreen, Semi Evergreen, Moist Deciduous, Open Deciduous, Closed Deciduous forests and grasslands with scrub jungles in the foot hills. The floral diversity is extremely rich owing to the different types of forest formations due to the altitudinal gradient and rainfall patterns. The sanctuary has one Medicinal Plant Conservation Area (MPCA) located at Thaniparai.

Barking Deer (Muntiacus muntjak)

Fauna

There is a wide range of herbivores, carnivores and omnivores in the Grizzled Squirrel Sanctuary. Resident and migrating elephants are common. The other important animals are Tiger, Leopard, Gaur, Nilgiri tahr, Spotted deer, Barking deer, Sambar, Wild-boar, Porcupine, Nilgiri langur, Lion-tailed macaque, Common langur, Slender lorris, Bonnet macaque, Sloth bear, Indian Giant Squirrel and Flying Squirrel

The sanctuary is inhabited by extremely rich and diverse fauna. Over 200 species of avifauna have been reported from this sanctuary that includes some rare birds such as the Red faced Malkoha, Nilgiri Flycatcher and Malayan Night Heron. The Great Pied Hornbill is well and widely distributed in the Sanctuary The main raptors are the Serpent Eagle, Hawks and Black Eagle. The Sanctuary has 18 species of snakes, 15 species of lizards, over 10 species of amphibians and over 56 species of butterflies now.

The Grizzled Squirrel (Ratufa macroura) flagship species of this sanctuary is highly restricted to South India and Sri Lanka. Ratufa macroura dandolena is distinctive in having the dorsal

Hedge Hog

Jackal (Canis aureus)

surface and tail grey or brownish grey more or less grizzled with white. It breeds once a year, producing a single offspring. The distribution of the Grizzled Squirrels is restricted to seven isolated riparian dry deciduous forests in the Sanctuary.

Activity pattern

As soon as day light appears in the morning the animal comes out of the nest., reaches the food trees and starts feeding. From 6 AM to 11 AM "Feeding" is its most dominant activity. In the evening, 3 to 4 PM is the major feeding time. The squirrels take rest between 11 AM and 3 PM .

Feeding habits

The squirrels feed mostly on fruits. When they perceive lack of fruits, they go in for tender leaves. Seeds, tender leaves and fruits are their diet. Tamarind forms the key food tree species in Alagarkoil area, but the squirrels survive also in localities where there are no Tamarind trees. The important food trees are Tamarind, Vagai, Usil, Naval, Neer maruthu, Thani, Neem and Mango.

Common Mormon

Home Range

The home range of an individual is between 0.197 ha. And 0.611 ha. This species is restricted to mixed deciduous forests and riverine forests occurring in plains or at elevations below 800 M MSL.

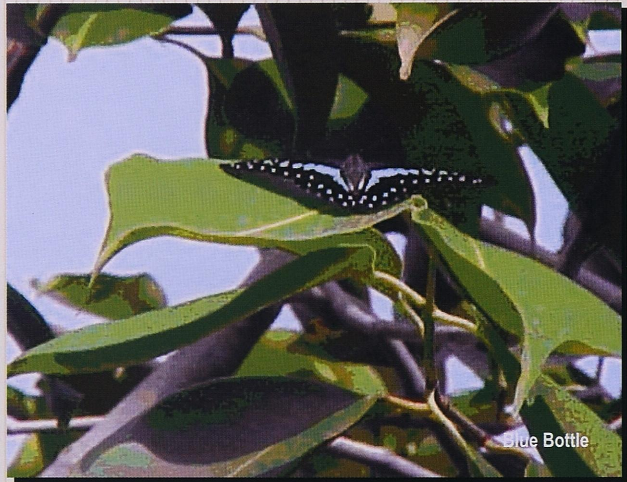
Drey construction and visit to drey

The drey's location is mostly at forked branches where crowns of neighbouring trees interlink. This would enable the squirrel to move away from the site by jumping from tree to tree when threatened. It is observed that an individual constructs two nests within its home range. The squirrels occasionally visit their nests during day time.

Approach

Sirvilliputhur is accessible form Madurai & Tirunelveli
Distance : From Madurai 100 KM
From Tirunelveli 98KM,. Nearest Airports Madurai (100KM)
Nearest towns are Rajapalayam and Srivilliputhur.
Good lodges are available.

The Indian Peacock


Blue Bottle

Green Billed Malcoh

Purple Rumped Sunbird

Tourist info

The sanctuary can be visited throughout the year. There are two dams viz. Pilavakkal and Koilar situated along the foothills of the sanctuary which are the best places to see water birds and other wildlife. There is one rest house situated inside the sanctuary in Mudaliar Oothu, one of the best places to see the Nilgiri Tahr.

For details contact

Wildlife Warden

7 & 8 Valaikulam street, Srivilliputhur - 626 125,
Phone : 04563-260565

Southern Hilltop Evergreen Forests
Shola - Grass Land Muthukuzhivayal

Great Indian Hornbill

The Indira Gandhi Wildlife Sanctuary and National Park, the largest and well preserved sanctuary in Tamil Nadu, lies in the Western Ghats south of the Palghat Gap, better known as the Anaimalais (Mountain of Elephants). With an area of 958 Sq.KM, it is rich in flora and fauna. This protected area constitutes the most important watershed for the agricultural economy and power supply. Major reservoirs like Parambikulam, Aliyar, Thirumurthi, Upper Aliyar, Kadambarai, Sholayar and Amaravathi are fed by the perennial rivers which originate from the Sanctuary.

The tribal communities living in the sanctuary are Kadar, Malasar, Malai Malasar, Muduvar, Pulayar and Eravalar. They participate in the management as Forest watchers and Antipoaching Watchers.

Location

The sanctuary lies in Coimbatore District.

The area lies between 10.13'-10.33' N and 76.49' 77.21' E

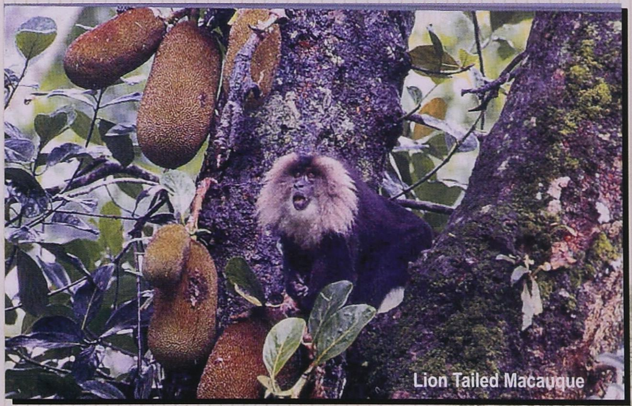
It was notified as a sanctuary in the year 1974. 108 Sq.KMs of its unique habitats at 3 places - Karian Shola, Grass Hills, Manjampatty were notified as National Parks in 1989.

Flora

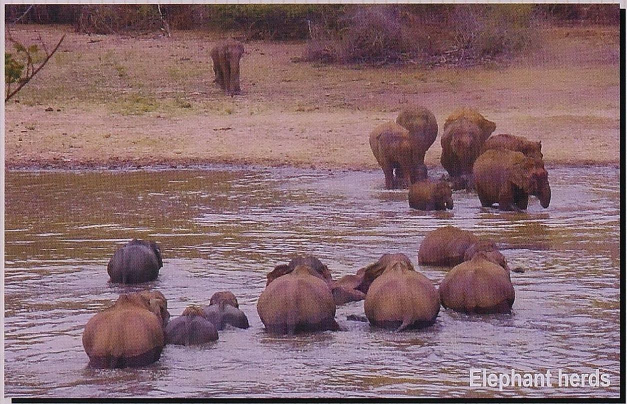
The Anamalais rise from foothills at the height of 300 M to Topslip-Parambikulam Plateau at 800M and to the Valparai Plateau, between 1000 and 1250 M. The elevation range includes an array of habitats ranging from dry thorn forests in the low foothills to semi-evergreen stretches to grass hills and evergreen sholas in Valparai.

Forest types in this Reserve are:

1. Tropical Wet Evergreen Forest.
2. Southern Tropical Moist Deciduous Forest



Lion Tailed Macauque



Elephant herds

3. Southern Tropical Dry Deciduous Forest

4. Southern Montane Wet Temperate Forest

5. Southern Tropical Thorn Forest

6. Dry Savannah Forest

7. Southern Bamboo Forest

8. Reeds.

The floral diversity has been estimated to be over 2000 species, of which about 400 species are of medicinal importance. The Karian Shola NP has been identified and designated as a Medicinal Plant Conservation Area (MPCA) due to its medicinal plant diversity.

Apart from its rich tree diversity, over 100 species of orchids, a wide variety of ferns, grasses, palms and canes abode here.

Fauna

The sanctuary supports extremely diverse faunal population and several species are exclusive to this area.

A wide variety of herbivores including elephant, gaur, Sambar, spotted deer, barking deer, mouse deer, nilgiri tahr and wild boar inhabit this Sanctuary. This is equally matched by carnivore diversity with Tiger, Leopard, Wild Dog (Dhole), Indian Fox, Leopard-cat and Jungle cat. Primates are represented by bonnet macaque, common langur, nilgiri langur, lion-tailed macaque and slender loris. Other important mammals include the Sloth Bear, Small Indian civet, Toddy cat, Ruddy mongoose, Stripped-necked mongoose, Common Otter, Smooth Indian Otter, Nilgiri marten, Indian Flying fox squirrel, Indian Giant Squirrel, Dusky stripped squirrel, Flying squirrel, Black naped Indian Hare, Bandicoot Rat, Grey musk shrew, Indian Porcupine, Indian Pangolin.

Musa

The Sanctuary is a birders' paradise. Over 300 species of birds have been sighted. Apart from the Great Pied Hornbil-the flagship species, rare birds like the Frogmouth, Red-winged crested cuckoo are found here. Birds of prey like Crested Serpent Eagle, Spot-billied Eagle, Black Eagle, Crested Gohawk, Rufous bellied Eagle, Jerdon's Baza, Mountain Hawk Eagle, Peregrine Falcon, Owl. Grey Jungle fowl, Painted Bush quail, Red Spurfowl, Malabar Pied Hornbill, Malabar Grey Hornbill, White-bellied Woodpecker, Alpine Swift, Brown-backed Needletail, Mountain Imperial Pigeon, Nilgiri Wood Pigeon, Dollar bird, Malabar Trogon, Asian Fairy Bluebird, Blue-bearded Bee eater, White bellied Treepie, White-bellied Shortwing, Wynad Laughingthrush, Hill Myna, Nilgir Flycatcher. Many species of flycatchers, Drongos, Treepies, Birds of prey, Thrushes, Warblers, Babblers, woodpeckers, Parakeets, Pigeons, Shrikes, Cuckoos, Swifts and Owls are also found here.

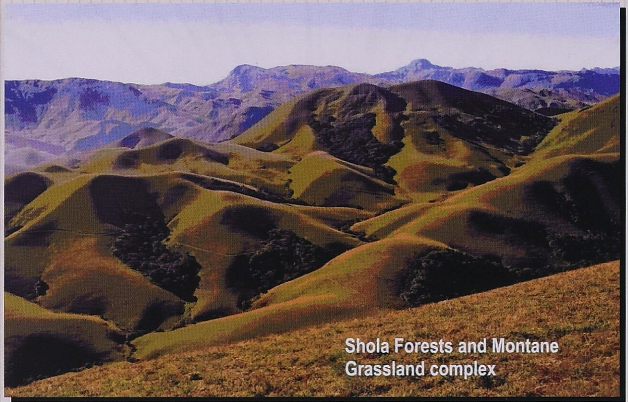
Cullenia excelsa

Cycas circinalis

The Sanctuary is a treasure house of several rare, endangered and endemic species of reptiles and amphibians. Rare reptiles like Travancore Cane turtle and Travancore tortoise, Marsh Crocodile,Common Indian monitor, Kerala Forest Terapin, Travancore Cane turtle, Forest calotes snake, Sand snake, Olive keel back, Water snake, Bronze bark tree snake, Perrotes shield tail snake, Common wolf snake and Green keel back are present here.

Southern Green calotes, Common skink, Snake skink, Draco or Flying lizard. Apart from this, several species of snakes including the poisonous King Cobra, Cobra, Common Krait , Saw-scaled viper, Russels viper , Bamboo Pit Viper, and non poisonus Indian rock python, Green keelback, Vine snake, Common warm snake, Sand snake, Olive keel back, Water snake, Bronze bark tree snake, Perrotes shield tail snake, Common wolf snake and Green keel back are present here.

The amphibians include narrow mouthed frogs like the Microhyla, tree frogs like the Malabar gliding frog, Green tree frog and toads like the Bufo beddomi and Bufo melanostictus.


Shola Forests and Montane Grassland complex

The insect diversity is amply demonstrated by a wide variety of butterflies and moths found here. It is very rich in grasshoppers, mantises, beetles, flies, ants, termites and spiders (arachinids), which play an important role in eco system sustenance.

Tourist info

The Sanctuary is highly diverse in its topography, altitude, rainfall, climate and temperature. Therefore, it naturally supports a wide variety of flora and fauna including several rare, endemic and endangered species of plants and animals. Diversity of landscape and its components enchants one and all alike be he a tourist, a trekker, an anthropologist, a wildlifer or a naturalist.

Moderate warm climate almost through the year makes it attractive destination throughout the year but the best time to visit would be December to April. The mercury ranges from 14°C 32°C during March to October and to 6°C-24°C during November to February Tourists may avoid rainy months.

Approach

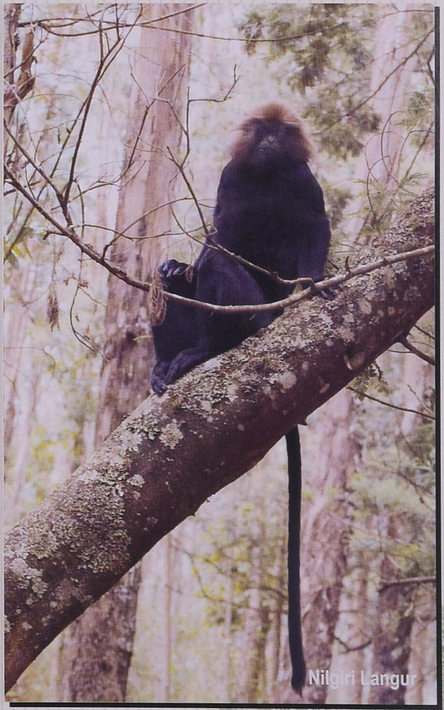
Bus services is available frequently from Pollachi to Topslip.

Nearest Railway Station is Coimbatore 87 KMs away.

Nearest Airport is Coimbatore 87 KMs away.

Places of Interest

Topslip is the place of first choice to most of the tourists. Ample accommodation, vehicle ride, elephant ride and regulated nature walk are provided. Adjacent Karianshola a tropical rain forest with tall rising trees and well-developed canopy forest is for serious visitors. Medicinal Plants Conservation area (MPCA) and interpretation centre here cannot be missed. In the west, it connects with Kerala's Parambikulam Wildlife Sanctuary


Nilgiri Langur

and a joint visit would give a taste of varied landscape and lot of surprises.

Elephant camp at Chinnar is 25 KM from Topslip. Grassy swamps and teak plantations and the Seychalli valley are other interesting spots.

Valparai is one of the highest mid elevation hill resort in the country. The tea plantations are surrounded by evergreen moist deciduous forest a rich elephant tract and a panther prowl.

Grasshills can be reached conventionally through Pollachi over the Attakatti ghat or from Topslip via Vargaliar and Manompally. The sholas and grass lands are continuous till Konalar hut and a briddle path connects the grass hills of the Eravikulam National Park in Munnar District. Rhododenron, Kurinji are popular in this tract. Tiger, panther, Elephant Nilgiri Tahr and many other wildlife are found to be peacefully existing in this area. The grass hills road ends at Konalar, a small mountain stream, across which the Konalar hut is located.

The Crocodile Farm at Amaravathi dam is one of the four major crocodile farms in the country and is a popular destination. The crocodile farm is also the home of grizzled squirrels with many nests located on trees within the farm. The forests around are ideal elephant tracts.

Monkey Falls located at the 29th KM junction on the Pollachi-Valparai Road, is the place for a refreshing bath in the natural falls.

Attakatti is about 36 KM. on the Pollachi Valparai state highway. A well maintained trekking shed is available near Attakatti. The area is an ideal dry deciduous and moist deciduous forest tract and home of Elephant, Tiger, Nilgiri Tahr, Sambar etc.

Luisia evangelinae

Monompally is about 85 KM from Pollachi and about 20 KM from Valparai has a beautiful trekking shed close to Manompally River. The place is known for its thick Shola Forests, fast flowing rivers and scenic beauty.

Manjampatty Valley is a unique elephant country. The Dhallinji and Manjampatti tribal settlements are within this area.

Thirumurthy hills , about 25 KM from Udumalpet, is famous for the Panchalingam water falls. The place has many tribal settlements around and has rich moist & dry deciduous forests.

Rhacophorus malabaricus

Chinnar is situated at about 25 KM from Amaravathi. Elephants are very common here. Deers and Bisons are also seen in large numbers. It has abundant population of Elephants, Grizzled Squirrels, wide variety of small mammals, birds and reptiles. Tigers are a common sight for visitors on this road.

As of March 2006, the following elephants formed our team:

Sl.#	Elephant	Sex	Age
1	Dev	Tusker	60
2	Valli	Cow	60
3	Sivagami	Cow	54
4	Vijayalakshmi	Cow	52
5	Pallavan	Tusker	51
6	Saradha	Cow	50
7	Selvi	Cow	45
8	Nanchan	Tusker	44
9	Kaleem	Tusker	39
10	Ram	Tusker	35
11	Suriya	Tusker	31
12	Pary	Tusker	24
13	Kapildev	Tusker	22
14	Karthik	Tusker	23
15	Barani	Tusker	20
16	Ashvini	Cow	20
17	Venkatesh	Tusker	19
18	Bullu	Tusker	2
19	Rajvardhan	Tusker	5
20	Kalpana	Cow	24
21	Unnamed	Calf	8months

Kelaart's Long Clawed Shrew

Plain Tiger

Trekkers delight

Several interesting trek routes are avaialable and regular guided treks are conducted during favourable season. Prior notice of a fortnight is necessary. Some of the enchanting trek routes are

1. Top Slip-Karianshola-Pandaravarai-Topslip trek of 12 KMs takes 5 hrs. It is best done during September March. It is a trek for animal and bird watching. There will be no need for camping enroute.

2. Akkamalai - Thanakkamalai - Konalar - Fishing hut Akkamalai. Moderate to steep climb to a distance of 10 KMs and climbing down for 20 KMs takes 7 hrs. during June. The route passes through vast stretches of rolling meadows with evergreen sholas. Herds of Nilgiri Tahr, a mountain goat are found. Fishing hut at Konalar is an exciting camp site.

3. Elumalaiyan Odai-Kamanuthu Pungan Odai-Udumalpet Moonar Road. A steep climb for two KMs and gentle undulating ground for 7 KMs. takes 3 hrs ; done during December- June. Panther, Gaur, Sambar, Deer, Elephant, Tiger and a variety of birds are sighted. Observation tower at Kamanuthu provision for halt at Amaravathi.

4. Monkey Falls - a linear stretch of evergreen forests is surrounded by rocky cliffs.

5. Varagaliar Kurampalliar and Varagaliar shola Perrunkundru Malai- back - a 14 KM stiff climb taking 7 hrs, is best done during September - March. It takes one through a stretch of lower elevation. Shola supports large number of arboreal animals especially primates (Lion Tailed Macaque and Nilgiri Langur). Nilgiri Tahr and Indian Hornbill can be sighted. Forest Rest House at Varagaliar will be the camping site.

Arundina graminifolia

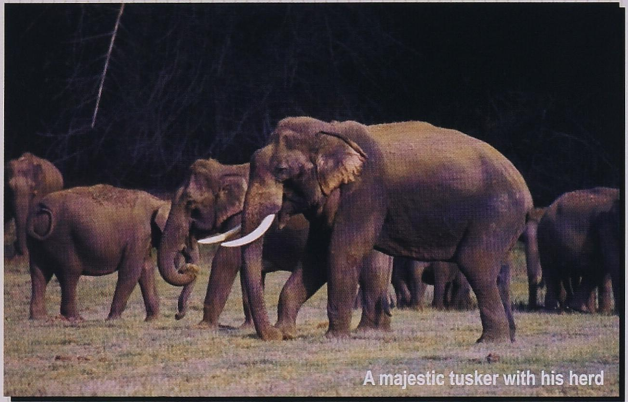
Ceylon frogmouth

Acccommodation

Comfortable accommodation is available at Topslip on prior booking at the Reception Centre in the office of the Wildlife Warden, Pollachi. There are cottages and group accommodation facilities available at Topslip to suit different budgets. Catering facility is at Topslip. Bookings are done at the Office of the Wildlife Warden, Pollachi.

For details contact

The Wildlife Warden,
Indira Gandhi Wildlife Sanctuary & National Park,
176, Meenkarai Road,Pollachi, Coimbatore 642001,Tamil Nadu.
Tel. (04259) 25356



A majestic tusker with his herd

Mudumalai Wildlife Sanctuary & National Park is situated at the tri-junction of Tamil Nadu, Kerala and Karnataka on the North Eastern Slopes of the Nilgiris part of Western Ghats descending to the Mysore Plateau. An erstwhile game reserve, Mudumalai was declared a wildlife sanctuary with a 62 sq KM area in the early 1940 by the then Madras Presidency. With Bandipur Tiger Reserve (Karnataka) in the north, and Wynad Wildlife Sanctuary (Kerala) in the west, the region forms a single, continuous viable habitat for a varied range of wildlife and is a part of the Nilgiri Biosphere Reserve. While Mudumalai's western half receives the southwest monsoon, the eastern tracts receive the relatively gentler north-east monsoon which results in a diversity of vegetation types and typical migration of herbivores.

Location

The Sanctuary has an area of 321 Sq. KM with 108 Sq.KM of National Park area. It lies within 11° 30' N to 11° 42' N and 76° 30' E to 76° 45' E. Rainfall ranges from 800 - 2000MM. Temperature varies from 14° C to 33° C. Altitude ranges from 100' MSL to 1200' MSL.

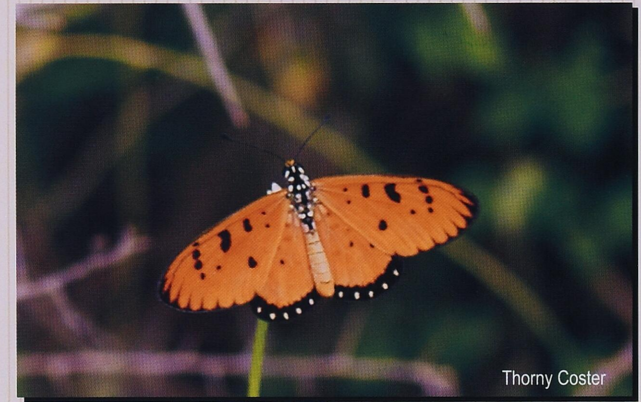
Flora

Tropical moist-deciduous vegetation towards the western parts of the sanctuary gives way to dry-deciduous and thorn-scrub along the east. It is varied with tall grasses called 'Elephant grass', Bamboo, valuable timber like Teak, Rosewood, Mathi, Vengai, Venteak and fine flowering trees and shrubs like Indian laburnum, Flame of the forest and Coral trees. Riverine patches and swamps add to diversity. Among the fruit bearers are jamun, nelli, jujuba and varieties of wild Figs.

Fauna

It is an exciting place to see Elephant, Gaur, Chowsingha, Mouse deer and Sloth bear. The animals include, Tiger, Panther, Sambar, Spotted Deer, Barking Deer, Blackbuck, Common Langur, Malabar Giant Squirrel, Flying Squirrel, Four-horned Antelope (Chowsingha), Wild Dog, Jackal, Mongoose, Jungle Cat, Rusty Spotted Cat, Leopard Cat Striped Hyena, Leopard-cat, Small Indian Civet, Striped-necked Mongoose, Ruddy Mongoose, Sloth Bear, Indian Giant Squirrel,, Sloth Bear, Wild Boar,

Common Indian Rock Python


Thorny Coster

Porcupine, Striped Hyena, Slender Lories, etc.. Tigers are largely elusive but leopards or a pack of Wild Dog, on the move are frequently seen.

Some of the rare birds of prey like the Rufous bellied hawk eagle can be occasionally seen in this Sanctuary. Avifauna is varied with Changeable Hawk Eagle, Black Eagle, Oriental Honey-buzzard, Jerdon's Baza, Bonelli's Eagle, Crested Goshawk, Besra, Mottled Wood Owl, Brown Hawk Owl Minivet, Hornbills, Golden Oriole, Chloropsis, Paradise flycatcher, Golden backed and Malabar Great Black woodpeckers, Bluewinged parakeet, Fairy bluebird, Jungle fowl Racket tailed drongo, Peacock Grey, Junglefowl, Red Spurfowl, Grey Francolin, Painted Spurfowl, Painted Bush Quail, White bellied Woodpecker, Lesser Yellownape, Golden Woodpecker, Streak-throated Woodpecker, Chestnut-headed Bee-eater, Emerald Dove, Green Imperial Pigeon, Pompadour Green Pigeon, Grey-bellied Cuckoo, Indian Cuckoo, Alpine Swift, Black-hooded Oriole, Greater Racket-tailed Drongo, Black-headed Cuckooshrike, Grey-headed Bulbul, Forest Wagtail, Crimson-bcked Sunbird, Loten's Sunbird.

The reptiles present are the Python, Monitor Lizard, Flying Lizard, Cobra, Krait , Vipers etc.

Approach

The Sanctuary is well connected by National Highway. All buses plying from Mysore to Ooty stop at the Reception Centre at Theppakkadu. It is approachable from Ooty by two different routes. One is via Kallatty, 36 KM from Ooty that has 36 hairpin bends through natural forests. The other route is via Gudalur which is 67 KM from Ooty. It can also be approached by road from Mysore, 91 KM away.

Nearest Railway station	: Ooty 67 KM., Mysore 90 KM
Airport	: Coimbatore 160 KM, Bangalore 245 KM.
Nearest fuel stations	: Thorapalli 7 KM., (towards Gudalur), Gudalur 18 KM., (towards Ooty) Gundalpet 30 KM (towards Mysore)

Indian Gaur (Bos gaurus)

Cheetal (Axis axis)

Tourist info

Mudumalai is organized with well-planned paths and is best explored by jeep or open vans. Several trails skirt waterholes where exciting animal activity can be watched.

Season

Climate is generally equable throughout the year. It is cooler between November and February and warm between March and May. Temperature ranges from 15°C-35°C

Best time to Visit

It is February to May and September to October. The clear days from late January to early April are rewarding for wildlife enthusiasts.

Entry fee :

Rs. 15/- per adult.

No private vehicle is allowed inside the Sanctuary.

Elephant Camp at Theppakkadu

The Theppakkadu Elephant Camp was established in 1972 in Mudumalai Range, which became the Mudumalai Wildlife Sanctuary in 1942. Its predecessor which served, as Range Headquarters was established in 1910 near the Mudumalai game hut and later shifted to Theppakadu.

The Forest Department took up elephant capturing by the conventional Pit Method from 1889 onwards in the Madras Presidency, mainly to build up the work force of elephants needed for timber extraction. In the Anamallais where large areas were cleared for planting with teak, elephant capturing operation was taken up in 1889 and until and upto 1972 more than 600 elephants were captured from wild to meet the demand for working elephants. In Mudumalai, elephant capturing was taken up in 1910 and continued till 1953. Thus there was a necessity of building up permanent Camp Sites with necessary infrastructure such as "Kraals" to train newly captured elephants. Surplus elephants and elephants considered not fit enough for timber extraction work such as calves were disposed off by conducting auction sales.

Nilgiri Langur (Presbytis johni)

The use of local tribal people as elephant handlers clearly predated the establishment of elephant camps. This system was followed mainly because of the tribals' expertise in the jungles, their long traditional association with capture and training elephants. Even today, the local tribals are the backbone of capturing, training and handling of elephant in the forest department. The Kurubas in Mudumalai, the Malasars, the Pullayars and Kadars of Anamallais are some of the tribals who have traditional knowledge in the art of capturing, training and handling elephants.

The captive elephants in the sanctuaries and national parks are no longer used for timber extraction work, since these areas are managed exclusively as protected areas. Hence the elephants are engaged mainly for the following purposes.

1. Eco tourism
2. Patrolling for anti poaching operations
3. To control Man-Elephant conflict outside the Sanctuaries or other areas (Kumki work).

Blue Mormon

Begonia malabarica

4. As a conservation & Training center for Asian elephants which can be visited by public.

At present all the captive elephants are stationed either at Theppakkadu. This creates considerable pressure on the exciting fodder resources around these camps. The surrounding area appears depleted of fodder. The addition, indiscriminate lopping of fodder trees within 10 kms radius around the camps has resulted in the total absence of many of the fodder trees particularly many species of Ficus, Grewia, Kydia etc. For this purpose and also to avoid infections through fecal infestation, periodic shifting of camp to rest locations is Mandatory.

The camp has a permanent Stores shed to keep the grain rations as well as various equipments and accoutrements intended for the day today use in the camp.

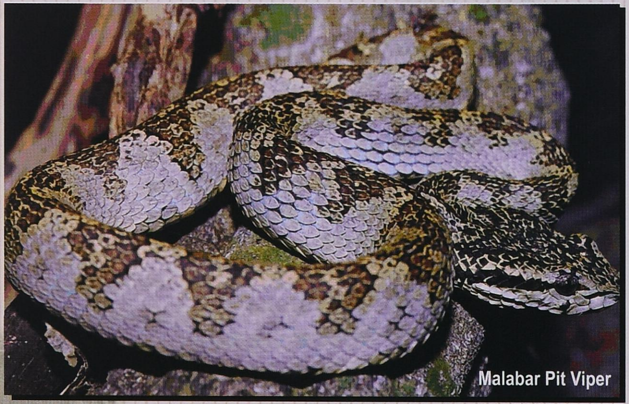
The elephant camp has one Forester who is responsible for the day to day management of the camp. A forest guard and sometimes a Forest Watcher assist him. The forest Range officer has the administrative control over the supervision of the camp and the staff.

Two persons, a mahout and cavady handle elephant over two meters in height. For the elephants under 2 meters in height such as the calves, only one attendant in the rank of Cavady is incharge.

All the elephants, in addition to natural grazing, are provided with grain rations in cooked form. The standard practice and norms are being followed. The Forest Veterinary Officer is the authority to fix the quantum of grain rations for each animal according to its size, sex, capacity for work etc.

Elephants used for work such as timber dragging, patrolling or any other hard work are given "work rations" as and when they are used for work. Resting animals or animals that are not engaged for work are given the "Rest Diet" which is less than the work rations since these animals spend comparatively more time in grazing.

An elephant being a mega herbivore needs to spend at least 16-18 hours per day for grazing and the working elephants spend considerably less time. In addition they spend every for various



Malabar Pit Viper

Rescue and Rehabilitation of Strayed Black Panther in the Nilgris

Rescued Black Panther freed in the Wilderness

Indian Wild Dog

types of works for which they are engaged. Hence they have to be compensated by providing more grain rations.

Some animals such as pregnant elephants, lactating or nursing mothers and animals, which are in run down condition, are prescribed special rations by the Forest Veterinary Officer or the Veterinary Assistant Surgeon in the camp.

The grain rations normally consist of Horse gram and Ragi and sometimes Rice. The prescribed rations are given in cooked from both in the morning and evening at fixed hours. In Mudumalai large number tourists witness the evening feeding.

Standardised Wooden Moulds are used for making cakes of known size and weight to facilitate easy check. If the animals are being fed the proper quantity of rations are prescribed. Each feeding shed prominently displays the ration chart indicating the quantity of rations prescribed for each elephant. This chart also has the biodata of the animals. This practice had been in vogue for long time and is followed in every camp.

The elephant camp at Theppakadu serves an important educational purpose, where over a lakh visitors every year, see the management and feeding of pachyderms and thereby increasing public awareness about the species. This also serves an important center for Research and Training for capture elephant management.

Theppakadu elephant camp is located just nearer to Theppakadu Reception Centre. There are 23 elephants. Visitors are allowed to this camp in the evening during elephant feeding to witness the feeding process. Everyday 2 elephants perform pooja to Lord Vinayaka inside the camp. The elephants are used for joy riding of tourists early morning and evening on charges. As of March 2006, the team includes the following elephants:

Other places of interest

Theppakadu, is the Reception Point, where acomodation, Van rides and Elephant rides are arranged.

Ombetta vayal swampy area, mid way between upper Kargudi and Mudumalai gamehut is a place to lookout for Elephant and Bison.

Nilgiri Marten

Sl #	Elephant	Sex	Age
1	Rathi	cow	71
2	Bama	cow	57
3	Indhar	tusker	54
4	Subramani	Tusker	52
5	Kamatchi	Cow	49
6	Anna	tusker	49
7	Moorthy	Makna	46
8	Mudumalai	Tuker	43
9	Sankar	tusker	36
10	Ganesh	tusker	36
11	Sujai	tusker	34
12	Vijai	tusker	34
13	Santosh	tusker	34
14	Senthilvadivu	Cow	33
15	Khasim	tusker	27
16	Cheran	Tusker	19
17	Jamboo	Tusker	19
18	Wilson	Tusker	17
19	John	Tusker	14
20	Sumangala	Cow	17
21	Udayan	Makna	6
22	Bomman	Tusker	6
23	Thava(calf)	Cow	4months

Mudumalai approached from Teppakkadu or Kargudi is a mixture of deciduous and grass area and rewarding with all the herbivores and carnivores. Benne is grass, bamboo and teak area with Sambar, Elephant, Gaur, Bear and Tiger. Scenic spots in the sanctuary includes the Moyar River-gorge and the Chief Minister's Watchtower, view point at Kargudi and the Ombetta Lake. The van rides in Sand Road, Circular Road, Manradiar Road, Jayadev Avenue, Bombax Road, and Public Roads. Kakkanalli Torapalli Road, Teppakkadu Masanagudi Road, Moyar Masanagudi Road are rewarding places to see most wild life in the Sanctuary.

Malabar Squirrel (Ratufa indica)

Accomodation :

Good accommodations are available. Bookings for visit and accommodation are done at Office of Wildlife Warden, Ooty.

For further information please contact:

Wildlife Warden
Mudumalai and Mukurthi National Parks and Sanctuary,
Mount Stuart Hill, Ooty 643001
Reception Range Officer,
Mudumalai Wildlife Sanctuary & National Park
Theppakadu, The Nilgiris. Ph: 0423-526235

Shola grasslands at Mukurthi

The Mukurthi National Park is located in the Nilgiris District of Tamil Nadu, the south eastern corner of the Nilgiris Plateau. Spread over 78.46 KM, this represents one of the very few areas which support a viable population of the Nilgiri Tahr. A fascinating feature of the Mukkurthi National Park is its endemism and relationship with the Himalayan flora and fauna.

The entire tract included in the National Park bears natural vegetation typical of higher altitudes of South India, comprising of rolling grassy downs, interspersed with temperate Sholas occupying depressions and valleys. The landscape is extremely picturesque and should be zealously protected and preserved to maintain the primeval beauty and grandeur of the tract.

The natural vegetation consists of vast stretches of grasslands interspersed with numerous isolated, compact sharply defined and small woodland "Sholas'. Only two storeys of tree layers are seen. Lianas are quite common, Epiphytes are abundant and consists mostly of lichens, ferns, bryophytes and various orchids. Several plants native to Nilgiris plateau have their nearest relatives in the Himalayas. The Rhododendrons, Black berries, Raspberries etc. are not found anywhere in peninsular India, between the Nilgiris and the Himalayas. The average elevation is around 2400 M. Above MSL. Kolaribetta is the highest point (2630 M). Other major peaks are Mukkurthi (2556 M) and Nilgiris (2477 M) The general slope of the area is towards the east and the south. The area is drained by innumerable beautiful and perennial little streams. The vast majority of the streams eventually fall into the Bhavani Puzha. The Kundha Range of hills form from the western edge of the Nilgiris Plateau, which rises steeply from Silent Valley, the Nilambur Valley and the Ouchterlony Valley and continue as an unbroken wall.

Due to high altitude, the climate is quite cold. Temperature ranges between 20°C. and below 0°C. Rainfall is about 2500 MM/per annum which occurs during April to August. Frosty nights are common from December to February. Monsoon rains are accompanied by strong winds and low visibility; mists are a factor to be reckoned with in the Sanctuary.

Impatiens species

Impatiens species

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Mukkurthi's wild animals are a fascinating mixture of plain and mountain animals. The close encounters with wild animals, are rare in the open Mukkurthi Country. The common mammalian species seen here include Nilgiri Tahr, Sambar, Barking Deer, Elephant, Blacknaped hare, Jungle Cat, Wilddogs, Jackal, Stripe-necked Mangoose, Nilgiri Martin, Otters, Giant Squirrel etc., The Avifauna are mostly hill birds, such as Kestrel, Black Eagles, Grey jungle fowls, Wood Cock and Thrushes.

Mukkurthi National Park is approachable through 4 different routes.

a) Avalanchi which is 30 KM. from Ooty From Avalanchi, Upper Bhavani is reached by road (25 KM), after Upper Bhavani Dam.

(b) From Anumapuram near Pykara which is 24 KMs. from Ooty in the Ooty Gudalur Mysore Road and then reaching Porthimund Dam.

(c) The third entry point for Nilgiris Peak area is near T.R. Bazaar in the Ooty Gudalur Mysore Road via Terrace Estate Road reaching Mudimund (40 KM).

(d) The fourth entry point is via, Parsons Valley Road, which leads to Western Catchment II and III.

Due to the tough terrain and difficult accessibility of the area, biotic interference is limited. Trekking along the prescribed trek routes and vehicle drives in the existing roads are the activities permitted.

Hab. longicornu

Approach

Nearest airport- Coimbatore (140 KM) from Ooty

Nearest railway station Ooty (45KM)

Trekking Routes

1. Bangitapal Sispara -16 KM
2. Bangitapal Sispara - Poochiparai - Silent Valley -52 KM
3. Devabetta Mukkurthi Peak -12 KM. Fishinghut (halt) 8 KM.
4. Kolarikutta Bangitapal - 20 KM (halt)
5. Western Catchment Bangitapal 14 KM
6. Trekking Shed Kangerkundi Nadugani -18 KM

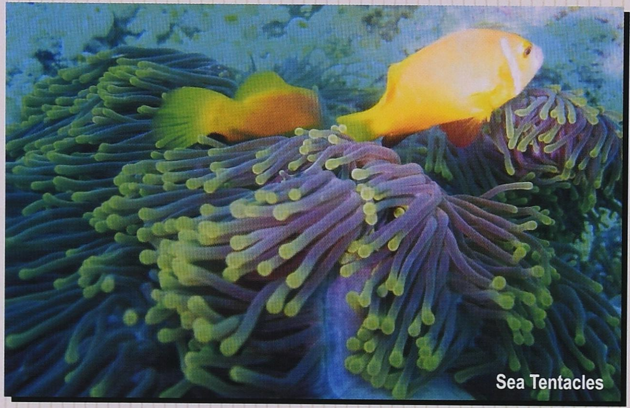
Forest Rest Houses

Bangi Tapal, Upper Bhavani (EB), Mukurthi Fishing Hut.

Contact:

Wildlife Warden
Mudumalai and Mukurthi
National Parks and Sanctuary,
Mount Stuart Hill, Ooty 643001
The Nilgiris, Tamil Nadu, India Ph: 0423-2444098

Impatiens acaulis



Sea Tentacles

The Gulf of Mannar Marine National Park has the core area of about 560 Sq.KM from Rameswaram to Tutucorin lying within the Gulf of Mannar Biosphere Reserve covering an area of 10,500 Sq.KM. on the south-east coast of India. It covers the coast of Rameswaram, Tutucorin, Tirunelveli and Kanyakumari. It is one of the world's richest regions from marine bio diversity perspective and the first marine Biosphere Reserve in Southeast Asia. The Biosphere Reserve comprises 21 islands with estuaries, mudflats, beaches, forests of the near shore environment, including marine components like algal communities, sea grasses, coral reefs, salt marshes and mangroves. Among the Gulf's 3600 plant and animal species, there are the globally endangered species Sea Cow (*Dugong dugong*) and six mangrove species endemic to peninsular India.

The inhabitants are mainly Marakeyars, a local Community principally engaged in fishing. There are about 125 villages along the coastal part of the biosphere reserve which support about 100,000 people .This coupled with dynamite fishing, machanised fishing boats, use of destructive type of fishing nets catching untargetted marine animals and corals and over harvesting of fish makes the efforts of conservation challenging here.

The Algal Flora of the Coral Reefs

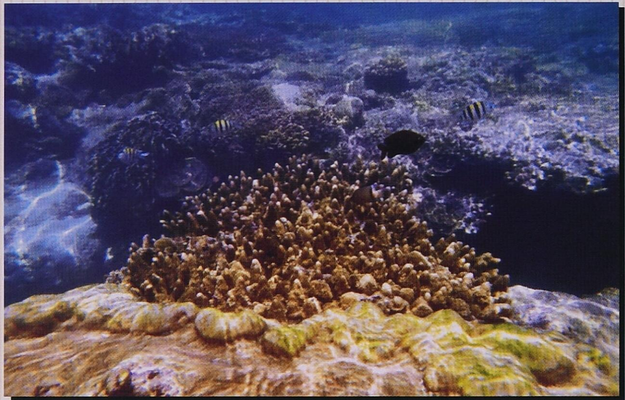
The algal species composition on the coral reefs is different from that found in the lagoons. The following species are noticed in the reefs :

Coral Reef Algae :

Ulva recticulata
Halimeda opuntia
H.tuna
Caulerpa racemosa V.Clavifera
Pocockiella sp.
Chnospora implexa
Sargassum sp.
Turbinaria conoides
T.ornate
Gelidiella acerosa
Chondrococcus harnemanni

Padina was observed on the shores and lagoons. Gracilaria Lichenoides was found more on the shore and lagoon than on reefs. Sargassum and Turbinaria are found on the shoreward part of the reefs.

Acropora cytherea



The predominant species on the coral reefs is Halimeda Opuntia. Caulerpa, Sargassum, Amphiroa Fragilissima, Gracilaria Lichenoides are the other dominant species.

The Seagrass Ecosystem

The Gulf of Mannar is rich in sea grasses. The following species belonging to Hydrocharitaceae and Potamoge tonaceae have been recorded. The sea grass beds provide food sources for the sea mammals, particularly Dugong dugong which feeds upon these pastures on the Gulf shoreline and surrounding islands like Krusadai. The Dugongs prefer pastures of Halodule uninervis for food. The species composition of sea grasses is as follows:

A. Hydrocharitaceae :

Enhalus acoraides - with ribbon-shaped blades
Thalassia hemprichii
Holophila ovalis
H.ovata
H.beccari
H.spipulacea

B. Potamogetonaceae:

Cymadocea serrulata
C.rotundata
Halodule uninervis
Syringodium isoetifolium

It is significant to observe that among marine angiosperms, only Enhalus acoroides shows aerial surface pollination. Most sea grasses are dioecious and cross fertilization is the rule. Not a single marine angiosperm is closely related to terrestrial plants. The marine share, however, in total angiospermic species is negligible. No marine dicot has been recorded so far.

Among the monocotyledons only one order (Halobiae) has produced some marine representatives (belonging to the families Potamogetonaceae and Hydrocharitaceae, as stated earlier). Den Hartog quotes that Syringodium invertifolium was reported from Tuticorin in 1900 by A.E. Thurston as Cymadocea aeguorea. Also this has been recorded on Musal Tivu, Hare island, and on Pamban (with flowers) by F.Boergersen and M.O.P.Iyengar. The latter has made a special mention of the necessity to take up these

Coral fish Yellow Butterfly

seagrass studies in view of their fascinating diversity (Iyengar 1927). Recent work also substantiates this view (Lakshmanan and Rajeswari, 1979).

The Mangrove Vegetation

The Gulf of Mannar islands possess unique mangrove vegetation, It is interesting to note that such vegetation consists of species belonging to Rhizophora, Avicennia, Bruguiera, Ceriops, Lumnitzera, etc. Although mangroves are found on a good majority of the islands, this vegetation on Manalli is striking for its luxuriance and diversity. They are not very tall trees perhaps the height is curtailed due to strong winds lashing here perennially and with greater velocity during monsoons, periodicals cyclones, etc. The plants are healthy. The whole island is carpeted as it were with pneumatophores wherever the mangrove forests are formed. The mangroves are seen with flowers on the island during December-January.

Acropora formosa

Acropora valida

On Krusadai Island, Iyengar (1927) observed a very luxuriant and diversified vegetation which has now passed into legend. He recorded many plants on the northern muddy shore to the west of Porites Bay belonging to mangrove vegetation. The species included many plants of Avicennia Officinalis, Excoecaria agallocha Bruguiera Caryophyllioides (now known as B.cylindrical) Ceriops Candolleana (now known as C.tagal) Lumnitzera Racemosa was noticed inside the swampy regions of the island where also Avicennia Officinales were seen. He recorded also many halophytesSuaeda maritime, S. monoica, Arthocnemum indicum, A.fruticosum var. glaucum, Sesuvium portulacastrum, Atriplex repends, etc. He further records very many algae.

The Coral Reef Formations

In the Gulf of Mannar fringing and patch, coral reefs occur. The reef framework is complex. It forms the basis of a very elaborate and functional ecosystem. The coral reefs exert influence on the course of water current. They also provide shelter

Sea Urchin

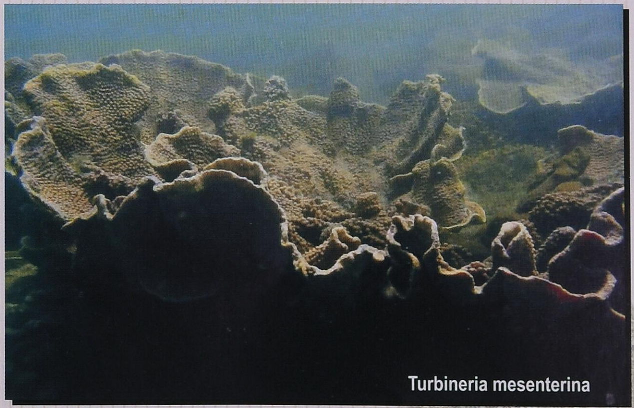
to a great diversity of algae, sponges, and fish, just to mention three groups. With the help of calcareous algae in shallow sea, the harmatypic corals build primary reef formation with secondary detrital reefs in deeper water. Apart from the sedimentary and fixed algae, we encounter drifting and imprisoned phytoplankton. Calcification is important for the formation of the coral reefs. There is no relationship between photosynthesis and calcification. Upon coral reefs, phytoplankton and algal populations assume greater significance. The hermatypic coral harbour filamentous algae in their "skeletal framework" as well as symbiotic zooxanthellae in their soft parts. The imprisoned algae release oxygen during photosynthesis, enough to meet the entire respiratory needs of corals and even spares the surplus production of oxygen.

There are three major reef formations. The Manalli reef is autotrophic, synthesizing an annual organic net production of 2,500 gm c/m^2. Apart from algae, the reefs also harbour boring sponges, mollusks, worms, echinoderms, common "shrimps". Fish etc. The corals are exploited mostly for limestone, as earlier stated, for use in various industries on the mainland.

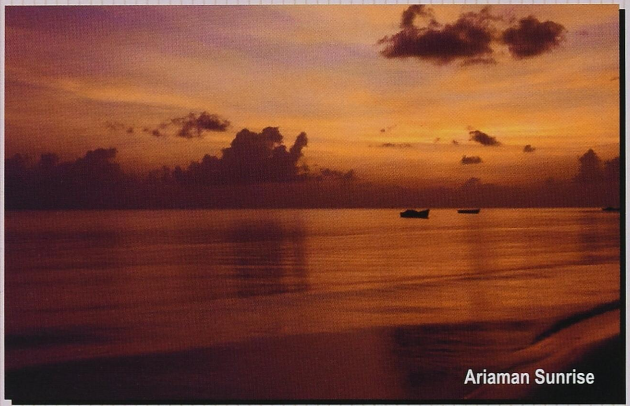
Of the Gulf of Mannar Islands, the eastern side of the islands would appear to have a greater expanse of living coral reefs. The human exploitation of the coralline stones is concentrated on the northern and the western sides. Hence the eastern sides remain now relatively free of human influence and interference and so exploitation is less (Isaac Rajendran and Kanagaraj David 1972). Recently, on the initiative of the Tamil Nadu Forest Department, the Government of Tamil Nadu have prohibited quarrying of corals after considerable loss of reefs to the point of extinction.

The coral reef flora, as stated earlier, were investigated by early workers. Recently the flora were studied by Umamaheswara Rao (1972) and by the Team Report (1978) - among many others. The pioneering works in this direction were by Iyengar. Thivy Desikachary, Krishnamurthy, Boergesen, among many others.

The boring sponges cause considerable destruction to corals. Thomas (1972) reported occurrence of 20 species of boring sponges in this region. Spirastrella aurivilli he recorded for the first time for the Indian Ocean region here and Aka minuta as new to science. Burton's



Turbineria mesenterina


Ariaman Sunrise

(1937) work on Krusadai island Porifera is still a masterpiece on the subject. The coral boring bivalves also cause great damage to corals. Appukuttan (1972) records about 20 such species for the Gulf of Mannar. There are about 120 species of corals in the Gulf of Mannar alone (Gopinadha Pillai, 1971). They belong to 33 genera. Of this 110 species belong to the families Acroporidae, Poritidae and Faviidae. It is said that the corals here are fast deteriorating, particularly due to human interference. There is also a Reef in the Palk Bay at Mandapam. There is a general resemblance as regards the distribution of species of Scleractinia of the corals in the Indo-Pacific Region.

The conspicuous species of the corals belong to the family Acroporidae (Acropora, Astreopora and Montipora). Montipora and Acropora, put together, constitute 39% of the total species recorded. Species belonging to Poritidae and Faviidae constitute the dominant reef builders here (Gopinatha Pillai, 1971) At the same time the conspicuous absence of certain very common Indo-Pacific genera either due to inadequate regional sampling or insufficient exploration or real extinction or just absent because of unfavourable conditions is noteworthy. The "absent" genera are Stylophora, Alveopora, Caulastrea, Diploastrea, Labophylla and Euphyllia.

The paucity of speices belonging to Fungidae is significant. The presence of Goniospora nigra is interesting. It shows clear affinity to the fossil member of the genus, a relic of the Tethys Sea. The genera Endopsammia and Polycyathus occur in the gulf exclusively when other areas like Red Sea, Tulear (Madagascar), Maldives, Andamans, Singapore and Cocos-Keeling are compared. The genera Siderastrea and Paracyathus occur here and in Red Sea alone. Malagasay (Madagascar) has 26 genera in common with the Gulf of Mannar.

Some of the factors affecting coral reef growth are regression of coral growth due to silt-laden water with greater load of suspended matter during monsoon flow, wind blown sandy deposition, cyclone, quarrying for limestone, effect of current etc.

A detailed account on the exploitation of corals, using it (in trade of the exploited products) as raw materials in industrial ventures such as cement industries, brick manufacture masonry

Green Sea Turtle

work, limekilns, etc, is given by Mahadevan and Nagappan Nair (1972). For the industries in the adjoining Tirunelveli District, the exploited materials are ferried from islands north of Nalla Thanni Tivu. Tuticorin fishermen go up to Valai Tivu upto 60 KM from Tuticorin, and after quarrying land then at Tuticorin.

Although legally quarrying of corals from the reef is stopped now, at its peak 250 M^3 of reef were removed daily. The species affected most belonged to Porites and the other corals attached with them. The reefs on some islands have been totally exploited beyond recognition. The coral reefs are fast deteriorating due to human interference, greater silt inflow draining from the mainland, etc. The wind force spoils racemose types of corals greater than the encrusting and massive coral types. The coral reefs act as breakers and their removal will alter the current pattern along the coastline. They act as coastguard against powerful tidal waves. Hence caution should be exercised against indiscriminate exploration and extensive siltation due to loss of forest cover on the coastline.

Location

The Gulf of Mannar Marine National Park lies within 08°47' to 09°15' N; and 78°12' to 79°14' E.

The 21 islands are 1 to 10 KM away from the coast of mainland and their extent vary from 0.25 ha to 130 ha.

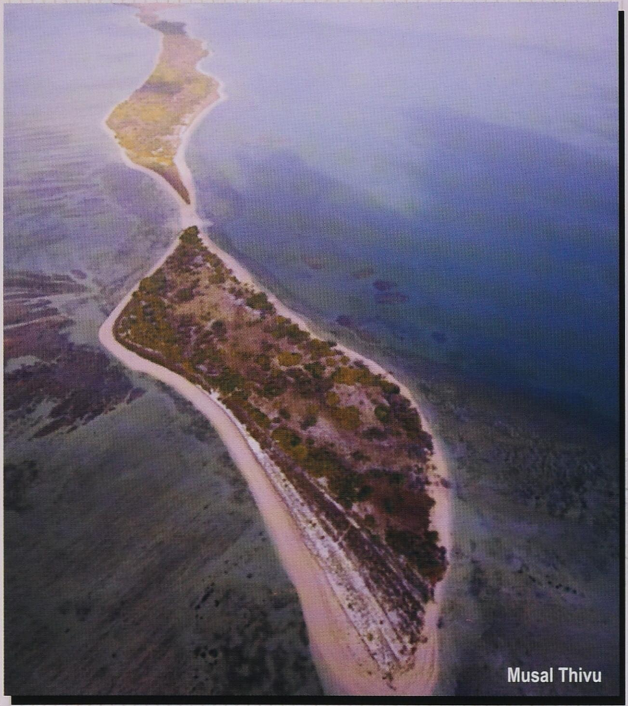
Flora

Major ecosystem types available are Coral reefs, mudflats, beach, island, shallow water and mangrove.

Dhanush Island

Sea grass beds dominated by family like *Hydrocharitaceae* and *Potamogetonaceae* and species Halodule uninervis, Cymodocea rotunds, C.Serulata ; Coral reefs; mangroves including Rhizophora muctonata, Avicennia alba, Bruguiera gymnorrhiza, Ceriops tagal, Lumnitzera racemosa are also common in the stretch.

The area has all the mangrove species available in India with Pemphis acidula being endemic and all the 11 sea-grasses of india



Musal Thivu

occur here with Enhalus acoroides being endemic. The area supports 147 species of sea-weeds.

Fauna

Abundance of sea-weeds and sea-grasses in grazing ground attract Sea cow (Dugong dugong) the flagship species of the protected area. Other marine creatures like Dolphins, Sea-horse, Sea-cucumber, Sea-anemone are common here. 137 coral reef species form the basis of the ecosystem where 3600 species of plants and animals are associated.

Peculiar animal like Balanoglosses living fossil linking invertebrates and vertebrates is endemic here. Sandy shores of islands is feeding ground for five endangered marine turtles Green turtle, Olive ridley turtle, Hawksbill turtle, Leatherback turtle and Loggerhead turtle and the first two breed here too.

The islands form a good habitat and a stop over between Chilka lake, Point Calimere and Sri Lanka for migratory birds. Nearly 180 birds are found here. Warders and sea-birds being most common. Lesser sand piper, Curlew sandpiper, Little stint are abundent; Rare birds like Red knot, Eastern knot, Crab plovers Bar tailed Godwit, Broad billed Sandpiper, Dunlin, Longtoed stint, Rednecked phalarope are regulars here. Little tern, Kentish plover, Stone plover, Stone curlew and Lesser crested sterna breed here. Thousands of larger flamingos winter here before returning towards Rann of Kuch.

Approach

Road : Manadapam is 150 KM from Madurai

Railway : Mandapam - Ramanathapram

Airport : Madurai

Tourist info

All the islands are uninhabited. Antipoaching sheds are operating. Glass bottomed boats available cater to the tourists visiting the area.

Nearest airport is Madurai (150 KM).

Nearest railway station is Tuticorin.

Contact :

The Wildlife Warden
Gulf of Mannar Biosphere Reserve
Mandapam, Ramanathapuram. Phone:04567-230079

Point Calimere Wildlife Sanctuary was created in 1967 for conservation of Blackbuck, an endangered and endemic species of India. The Sanctuary is located in Nagapattinam District of Tamil Nadu. This vast swampy tract of Point Calimere is the scene of one of India's greatest avian spectacles. Point Calimere encompasses 17.26 Sq. KM of sandy coast fringed by saline swamps and thorny scrub around the backwaters.

Flora

The unique Tropical Dry Evergreen forest of the Sanctuary houses more than 150 species of medicinal plants. *Manilkara hexandra*, locally called Palai, is an important species of the Sanctuary.

Fauna

Blackbuck, locally called Velimann, is the key species of the Sanctuary. They are mostly seen grazing in the open grassland area.

Other important animals of the sanctuary include Spotted Deer, Jackal, Civet, Wild boar, Jungle Cat, Bonnet Macaque, Blacknaped Hare and the Common Indian Mongoose. A notable feature of the sanctuary is the presence of feral horses.

Olive Ridley turtles have been regularly nesting in the sanctuary beach. During winter, Dolphin sighting is common along the sanctuary coast. Between October and March, it is crammed with a great variety of birds-terns, gulls, storks, herons and enormous congregations of coastal waders, but the most spectacular are the Lesser and the Greater Flamingos.

With the arrival of north east monsoons, migratory birds start congregating in and around the Sanctuary. More than a hundred species of migratory birds visit the sanctuary. They include Flamingo, Painted Storks, Pelicans, Teals, Terns, Ducks and a variety of shore birds. About 20,000 Flamingoes visit the Sanctuary every year. The rare Spoonbill Sandpiper has also been sighted in the sanctuary. White bellied Sea Eagle, Montagu's Harrier, White-eyed Buzzard, Peregrine Falcon, Common Kestrel, Osprey, Blue faced Malkoha, Pied Cuckoo, Blue tailed

Sand Grouse

Bee eater, Yellow billed Babbler, Chestnut-tailed starling, Asian Paradise- flycatcher, Greater Flamingo, Lesser Flamingo, Spot billed Pelican, Great Cormorant, Grey Heron, Purple Heron, Western Reef Egret, Eurasian Spoonbill, Northern Shoveler, Red-crested Curlew, Spoon-billed Sandpiper, Black tailed Godwit, Asian Dowitcher, Pallas's Gull, Caspian Tern, Great Crested Tern, Black-capped Kingfisher are some of the other important species.

Approach

It can be approached from Nagapattinam (60 KM) and Thanjavur (110 KM) by road. Chennai 360 KM by road.

Tourist info

Several historical sites like Ramar Padam, Modimandapam and Old Chola lighthouse are located in the Sanctuary. Ramar Padam carries the stone footprints of Lord Rama. One can have a beautiful view of the Sanctuary from the watch tower located near the shrine.

Indian Wild Boar (Sus scrofa)

The ruins of a 1000-year old Chola light house stands at the point known as Point Calimere. Here, the Bay of Bengal meets the Palk Strait. A modern lighthouse constructed in 1890 lies close to the spot.

The easy sighting of birds in a mix of habitats adds to the appeal of Point Calimere. There are reportedly more than 250 avifaunal species in this Sanctuary. Boat-rides facilitate bird-watching in some parts.

Thanjavur, just 90 KM away, was the seat of the celebrated Chola kings from the 10th to the early 14th century. Its famous medieval temple architecture provides a break from the wildlife.

Open Season	Throughout the year
Best time to visit	November to April
Climate	(March to October) 20°C - 40° C

Accomodation

Flamingo House (Poonarai Illam), a Forest Rest House is available at Kodikkarai.

Contact

Wildlife Warden,
Point Calimere WLS, Collectorate,
Nagapattinam 611 002, District Nagapattinam,
Tel. (04365) 253092

Cheetal (Axis axis)

The Guindy National Park, 2.70 Sq.KM wide is unique in more ways than one. It has the rarest vegetation type the tropical dry evergreen vegetation. It is one of the smallest national parks and is situated right in the heart of a metropolitan city - Chennai. But perhaps the best of all is that it has a role in both ex-situ and in-situ conservation.

Guindy National Park is home to 400 black bucks, 2000 spotted deer, 24 jackals, a variety of snakes, a wide variety of snakes tortoises, geckos and over 100 species of birds, over 60 species of butterflies and spiders each, a wealth of different invertebrates-grasshoppers, ants, termites, carbs, snails, slugs, scorpions, mites, spiders, earthworms, millipedes, etc., These are free-ranging fauna and live with the minimal of interference from human beings. The only major management activity is protection as in other in situ conseration area. The park boasts of over 350 species of plants, and form a natural destination for botanists.

About 22 acres of GNP has been carved out into a zoo for ex-situ conservation. This entails keeping different species in captivity on view to public. Children's Park - the zoo was started with the idea of providing children a natural environment, to educate them about animals and create awareness on conservation. The animals, which have bred well in recent years in Children's Park include black buck, sambar, spotted deer, porcupine, hyena, jackal, python, grey pelican, night heron, cormorant, cockatiel, mongoose, bonnet monkey and common langur.

With the aim of spreading awareness, nature camps are conducted for school students inside the National Park and told of the importance of the bio-diversity found therin. There is also a new interpretation center giving information about the bio diversity found inside the park.

Over 7 lakh visitors come to GNP every year. With the onslaught of development in Chennai, GNP is one of the last strong holds of bio diversity providing peaceful pollution-free atmosphere to many Chennai-sites.

Tourist Info

Nearest airport is Chennai (Meenambakkam) (16 KM)
Nearest railway station is Chennai (12 KM)

For further information contact :

Wildlife Warden,
259 Anna Salai, DMS Compound, Teynampet, Chennai 600 006. Ph. 044-24321471

Star Tortoise

Chennai has the distinction of having the first zoo in India, created in 1855. This was shifted from the then Madras City to Vandalur Reserve Forest and a modern Zoological Park was established in 1979 by the Tamil Nadu Forest Department. Spread over 510 ha. of dry evergreen forests with gentle undulating terrain, the specially created open wet and dry island type enclosures with hidden walls and simulated natural environment help the animals, birds and reptiles to feel their natural environment. Chimpanzee, the nearest ancestor to human beings, keeps you busy for a while.

Objectives:

1. Ex-situ propagation of critically endangered species to prevent their extinction.
2. Wildlife Education and interpretation aimed at a wider public appreciation of wildlife
3. Wildlife research to promote wildlife conservation and management.

General Information:

1. Opens daily from 9. AM. to 5 PM except Tuesdays
2. Battery vehicles are available for the public
3. Private vehicles are not allowed inside

Approach

1. By Road : 32 KMs. from Chennai City.
2. By Rail : Nearest Railway station is Vandalur 1 KM Tambaram Railway Station 6 KM.
3. By Air : Nearest Airport - Meenambakkam (15 KM)

Entrance fee (per head) :

Adult : Rs.15/-

Children- below 5 years no fee

- 5 to 12 years - Rs.10/-

School children(Govt. Schools) Rs.2/-

Enjoy a ride on noise and pollution free Road trains to watch the animals.

Our specialities Include

- Safari Parks for Lion and Deer
- Reptile House
- Nocturnal animal house
- Aquarium
- Walk through aviaries
- Prey predator concept enclosures (Tiger Sambar)
- Jurassic Park
- Elephant joy ride
- Battery operated vehicles
- Children's Park
- Education centre

Other interesting aspects of the Park are :

- Feeling and moving freely in the simulated natural environment, lions welcome you to enjoy the thrill of their nearness in the Safari.
- Live size models of Prehistoric animals at Pre historic animal park of A.A.Z.P. remind you of the Jurassic Park.
- Highly threatened in their natural habitat Asian Elephants have the biggest enclosure in the park for their free movement.
- A prized and colourful species Rosy pelican can be seen in all seasons at the walk through aviary.
- Zebras mother and daughter communicating in their own way.
- Highly endangered and endemic to the Western Ghat the Lion tailed macaque is breeding well in captivity.
- Sitting inthe nest with their guests painted storks.
- Llama a relative of Camel from South America one of the rare species in Indian zone.
- Highly endangered and endemic to Himalayan region, Himalayan Black Bear adapted well to its new environment.
- The AAZP is also actively involved in spread in environmental education. Informative board on Pollution threats.
- Apart from learning about the wild animals, you children have a nice time at Children's Park AAZP.
- Hippopotamus native of Africa breeding well in captivity at the AAZP.
- Prey predator concept - a simulation of Tiger - Sambar co-existence although they are not.

Our appeal to visitors

- Do not feed the animals.
- Help us keep the park clean
- Avoid smoking inside the park
- Alcohol drinks are prohibited
- Religious preaching and distribution of notices is not allowed
- Do not cause injury to the animals.

Other charges

Battery operated vehicle

Zoo round	Adult	:	Rs.12/-
	Child	:	Rs.6/-
Lion Safari	Adult	:	Rs.12/-
	Child	:	Rs.6/-
Wheel Chair			Rs.10/-
Camera			Rs.25/- (Video cameras not allowed)

Vehicle parking charges :

Bus	Rs.5/-
Car	Rs.2/-
Motor Cycle	Rs.1/-

Private vehicles are not allowed inside the park

For details contact :

Director, Arignar Anna Zoological Park,
Vandalur, Chennai-600 048 Ph:044-2376089, 044-2376741

Wild Biodiversity of Tamil Nadu

Flamingos

Pulicat Lake Bird Sanctuary is a saline backwater lake lying along the T.N.-A.P coast, part extending to Chengalpattu District of T.N. It has an area of 481 Sq.KM and it is the 2nd largest brackish water lagoon in India after Chilka Lake in Orissa. The area on the TN side is 153.67 Sq.KM.

The Pulicat Sanctuary is drained by Arni River while the Buckingham canal brings in the city's drainage water. At the southern end is an opening to Bay of Bengal through a shallow mouth of 200 M in width. The rest of the lake is closed by a sand bar running parallel to the Bay of Bengal in the form of the Sriharikota Island.

Fauna

The wetlands eco system are considered as among the richest areas of bio diversity. Pulicat, by virtue of the mixing of fresh water with sea water is found to be an ideal habitat for diverse life-forms. 160 species of fish, 25 species of polychaete worms, 12 species of prawn, 19 species of mollusk and 100 species of birds are well documented apart from a number of other aquatic flora and fauna.

Among the most spectacular is the flamingo-a tall gaunt, white-coloured bird with a touch of pink on the wings, pink beak and legs, seen feeding in shallow water. The squat, large-billed grey pelican with gular pouch and a number of ducks are commonly seen. Flocks of sea gulls and terns circling in the sky or bobbing up and down on the water are an added attraction at Pulicat. Besides, there are a number of waterside birds and waders such as curlews, stilts, plovers, sand pipers, lapwings and redshank. Egrets, herons, kites etc. are some other birds found here. The lake is also home to crabs, clams, mussels, oysters, snails, fish worms, insects, spiders, sponges, anemone, prawns, plankton and so on including rare endemic species like gilled leech, an unidentified bloodred fish, etc.,

Rapid siltation has caused loss of bio diversity. It is seen that mangrove is found on Sriharikota Island indicating their existence some years back. Loss of mangroves may be one of the reasons hastening siltation, reducing biodiversity and hence depriving fisherfolk of their livelihood.

Approach

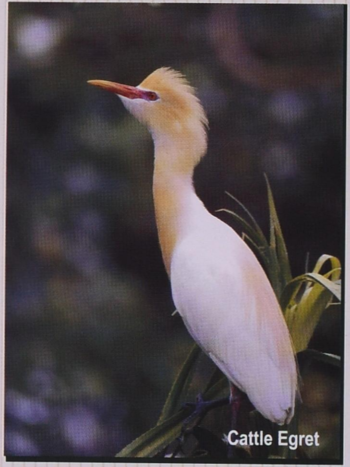
Nearest City	:	Chennai (90 KM away)
Nearest Town	:	Ponneri (19 KM way)
Transport	:	Bus services from Chennai, etc.
Nearest Airport	:	Meenambakkam, Chennai
Approach	:	NH5

Tourist info

Accomodation	:	Forest Rest House with 2 suites available for stay.
Season	:	November February

For further information contact
Wildlife Warden,
259 Anna Salai, DMS compound,
Teynampet. Chennai 600 006. Ph. 044-24321471

Spotbilled Pelican



Cattle Egret

Vedanthangal Birds Sanctuary is one of the smallest and oldest in the country with a unique history. The local people have been protecting the sanctuary for centuries now because they have realized that the bird droppings falling into the tank increases nitrogen content of the water and when used to irrigate crop, increases the yield greatly and saves the cost of fertilizers. As far back as 1798, the village folk convinced the authorities to give protection to the birds of the 30 ha. area of the Vedanthangal tank. Around 30,000 birds come every season even though the area is just 30 ha. It attracts multitudes of herons, egrets, storks, ibises and spoon bills. If the monsoon is heavy, these trees can be partially submerged. Despite its compact size, Vedanthangal is worth a visit, especially between October and January, for the experience of seeing nesting birds in thousands within close range.

Location

The Vedanthangal Lake Birds Sanctuary at 122 M above MSL lies 48 KM inland from the Bay of Bengal in Chengalpet District of Tamil Nadu.

Flora

The rain fed Vedanthangal tank is dry through much of the summer. An earthen embankment along its western precincts impounds the water when the tank begins to fill in August. It does not support permanent water plants.The Barringtonia trees at the edges and the center of the tank supports the nests and are scenes of hectic activity. Their crowns, looking like leafy green islands in the water serve as nesting platforms and perch-sites.

Fauna

One of the first birds to arrive at Vedanthal are Openbilled storks and breed twice during the same season before leaving the sanctuary.Egrets,Spot billed pelican, Painted stork, Great cormorant, Indian Cormorant, Darter, Eurasian spoonbill, Asian openbill, Black-headed Ibis, Grey Heron, Purple Heron, Great Egret.are seen in large numbers. Some of the other commonly seen waterfowls are the white ibis, night heron, darter, pond heron and ducks like Comb duck, pintails, common teals, dabchick, shoveller, black-winged stilt, little stilt, red shank, sand piper, ringed plover, curlew etc., and arboreal birds like parakeets, babblers, mynas, barbets, bee-eater, rollers, cuckoos onoles, drongos etc., and raptors such as blck winged kite, Brahminy kite, short-toed eagle, pariah kite etc., are seen in Vedanthangal . Mammals seen here are Jackal, Jungle Cat, Wild Boar, Black-naped Hare.

Approach

Distance by road : Chengelput 34 KM, Mamallapuram 45 KM, Chennai 82 KM. towards the south west and is approached by NH45.

Best time to visit : November to March.

Accommodation

One Forest Rest House available at site.

For further information contact

Wildlife Warden,
259 Anna Salai, DMS compound,
Teynampet. Chennai 600 006. Ph. 044-24321471

Openbilled Stork

Located about 86 KM from Chennai in Madurantakam Taluk of Chengai Anna District, this is one of the most tranquil and beautiful place near Chennai. Spread over 61.21 ha, this comprises of two rain fed irrigation tanks. The water enriched by bird droppings results in increased yield. Beginning with the open billed storks, the birds start arriving in Sept-Oct. Karikkili is a haven for ducks and waders. Pintailed ducks, Garganey teals, common teals, Shovellor, Little Grebe or Dab chick, Herons and Egrets are the other avian visitors.

Approach :

MH 45

Nearest Railway Station : Chengalpet

Nearest Airport : Meenambakkam, Chennai

Accomodation

Vedanthangal FRH

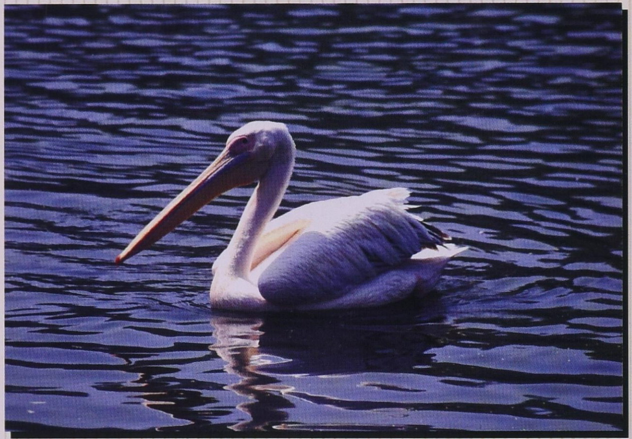
Openbilled Stork

For further information contact

Wildlife Warden,

259 Anna Salai, DMS compound,

Teynampet. Chennai 600 006. Ph. 044-24321471



Spread over 454 ha, the Sanctuary attracts about 90 species of water birds. A total of 188 species of birds have been recorded in the sanctuary. The Karaivetti Bird Sanctuary is located in Perambalur District of Tamil Nadu.

Fauna

Important water birds visiting the Sanctuary includes the high flying Barheaded Goose, long migrants like White stork and White necked Stork, Grey Pelican and Ibis. Sixteen species of Ducks and twenty three Species of Waders have been recorded in the Sanctuary. Birds start arriving in November and stay on till May. Population of migratory birds is maximum in the month of January. Upto 50,000 birds have been recorded visiting the Sanctuary during peak season. Important land birds visiting Sanctuary include the Rosy Pastor, Peregrine Falcon, Osprey, Marsh Harrier, Tawny Eagle, etc., Nearly 100 species of land birds have been recorded in the Sanctuary.

Approach

The Sanctuary is located 50 KM from Trichy and 35 KM from Thanjavur. The nearest township Ariyalur is situated 12 KM from the Sanctuary.

Tourist info

A notable aspect of the Sanctuary is regular nesting of waterbirds. During March 2002 water bird census, 250 nests were counted and species like the Grey Pelican, Spoonbill, Ibis, Openbill stork, Cormorant etc., were found to breed. The Sanctuary is basically an irrigation tank that received water from Mettur dam and north east monsoons. It remains dry from June till August.

Entry fee	:	Entry is free for visitors
Accomodation	:	Accomodation is available in private hotels and lodges in Thanjavur (35 KM) and Trichy (50 KM)
Widlife viewing	:	The ideal time to visit the sanctuary is during December to January. The sanctuary is open to visitors throughout the year.

Contact

Wildlife Warden,
Point Calimere WLS, Collectorate, Nagapattinam 611 002,
District Nagapattinam, Tel. (04365) 253092

Spoonbill

Udhayamarthandapuram Bird Sanctuary was created in December 1999. The Sanctuary is home to variety of migratory water birds like Coot, Grey Heron, White Ibis, Open bill Storks, Night Heron and Purple Heron.

Location

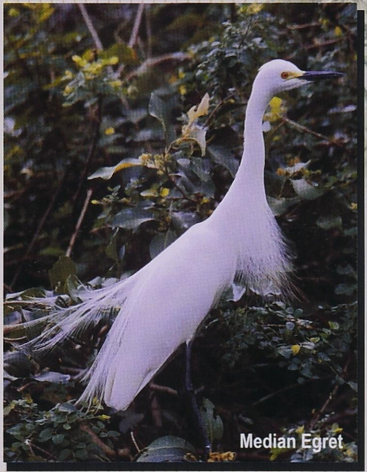
Udhayamarthandapuram Bird Sanctuary is located in Thiruvarur district of Tamil Nadu. The total area of the sanctuary is 45 ha. The Sanctuary is basically an irrigation tank that is fed by water from Mettur dam and by the northeast monsoon from August till December. It remains dry from April till August.

Flora

The Sacntuary's diverse habitat includes lily patches, reed brakes, aquatic grass, etc.

Approach

The nearest town Muthupet is situated 6 KMs from the Sanctuary. The sanctuary can be approached from Tiruvaur (65 KMs) and from Thanjavur (68 KMs) by road. The nearest railway station Muthupet is located 6 KMs from the Sanctuary.



Median Egret

Fauna

Birds start arriving from September onwards. Bird population peaks during November- December. Upto 10,000 birds congregate during peak season. A notable aspect of the Sanctuary is regular congregation of a large number of Openbill storks during February - March.

Tourist info

The Sanctuary is open to visitors throughout the year. There are two watch towers inside the Sanctuary for visitors

Entry Fee : The Sanctuary is free for all visitors

Wildlife viewing : The best time to visit the sanctuary is during November

Accomodation is available in PWD Rest House and private lodges in Muthupet (6 KM). Hotels with modern facilities are available in Thiruvarur (55 KM.)

Nearest Airport: Trichy (110 KM)

Nearest Railway Station: Thiruvarur (55 KM)

Contact

Wildlife Warden,
Point Calimere WLS, Collectorate,
Nagapattinam 611 002, District Nagapattinam, Tel. (04365) 253092

Large Cormorant

Vaduvoor Bird Sanctuary is located in Thiruvarur District of Tamil Nadu. The nearest city, Thanjavur, is located 25 KMs from the Sanctuary. Created in July 1999, the Sanctuary attracts more than 40 species of water birds like Ibis, Painted stork, Grey pelican, Pintail, Cormorant, Teals, Herons etc..

The Sanctuary is a large irrigation tank which receives water from Mettur dam especially from the northeast monsoon from August to December. It remains dry from April to August.

Fauna

The Sanctuary is a favourite flyaway spot for migratory birds and has recorded congregation upto 20,000 birds in November. The ideal time to visit the sanctuary is November - December when congregation of migratory birds is maximum.

Approach

About 75 KM from Trichy and 25 KM from Thanjavur.

Tourist info

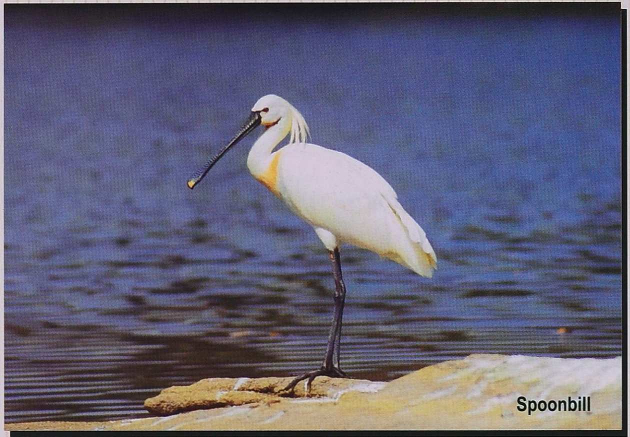
The Sanctuary has basic facilities for overnight halt for a limited number of visitors. There are two watch towers inside the sanctuary for bird watching.

Entry fee	:	The Sanctuary is free for visitors
Accomodation	:	Available in private hotels and lodges in Thanjavur (25 KM)
Birdwatching	:	The best time to visit the Sanctuary is during November to December. The Sanctuary is open to visitors throughout the year.

Contact

Wildlife Warden,
Point Calimere WLS, Collectorate,
Nagapattinam 611 002, District Nagapattinam, Tel. (04365) 253092

Night heron



Spoonbill

The Bird Sanctuary was declared in 1989, with an estimated area of 47.63 ha. The Sanctuary area is within the community tank embankments and its immediate water holding channel, measuring approximately 15 metre from the bottom of the embankment. Most notable feature of the Sanctuary is the prominent growth of Babul (Acacia nilotica) trees.

Location

Chitrangudi Bird Sanctuary is otherwise known as "Chitrangudi Kanmoi" and is located at 9°19'N and 78°28' E . It is a part of Chitrangudi village of Mudukulathur Taluk, Ramanathapuram District. An aerial view of the sanctuary gives out a crescent or fish tail shape. The Kanmoi starts at a northern point where a channel from the Gundar flows into the Kanmoi through an aqua duct. Total length of the embankment is 4.010 KMs. There are 5 sluices that drain water to the agricultural lands. Excess water is let out during flood conditions through a sluice gate about 0.5 KM from the inlet aqua duct towards Chitrangudi village

Flora

The sanctuary vegetation can be classified generally as that of tropical dry deciduous type. It is dominated by Babul (Acacia nilotica) along with Prosopis juliflora and grasses such as Cynodon dactylon and Eremopogan faveolatus. The tank bund and the area outside the tank are having Tamarindus indica, Ficus Spp, Neem (Azadirachta indica), Thespesia Populnea, Albizzia amara, Moringa oleifera and Palmyra (Borassus flabellifer). The plantation of Acacia nilotica was raised in 1979 by Farm Forestry division'. Presently there is no area in the Sanctuary which is devoid of vegetation. Every nook and corner is occupied by Prosopis. Cascuta creepers are also growing widely in the sanctuary and many a times retarding the growth of Prosopis. In addition the medicinal plants such as Ocimum sanctum, Gloriosa superba are also found in the area.

Fauna

The Sanctuary offers ideal habitat for winter migratory birds with considerable diversity in nesting and feeding behaviours. It is one of the preferred nesting sites for heronry species and colonial birds migrating to South India. The feathered visitors flock the Sanctuary from October to February. The wetland is irregular in depth and retains water for 3 to 5 months if rain is normal. Breeding population consists of Spot billed Pelican, Open billed stork, Liitle egret, Large egret, Grey hreon, Purple heron and Pond heron.

Approach

By road : 120 KMs from Madurai 45 KMs from Ramanathapuram
12 KMs from Sayakudi town.

Railway : Ramanathapuram 45 KMs Airport : Madurai 130 KMs

For furthur information Contact:

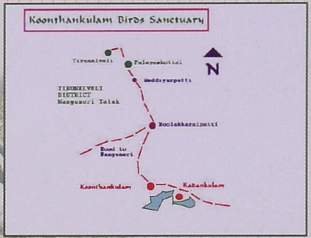
Wildlife Warden
Gulf of Mannar Biosphere Reserve
Mandapam, Ramanathapuram. Phone:04567-230079

Painted Stork

Koonthankulam Birds Sanctuary is a unique Sanctuary actively protected and managed by the Koonthakulam village community. The largest breeding water bird reserve in south India attracts more than one lakh birds annually. It is located 35 KMs away from Tirunelveli in Tirunelveli Thisaianvilai Road comprising of Koonthankulam and Kadankulam tanks covering an extent of 129.33 hectares and declared as sanctuary in 1994.

It is significant that the local people have taken keen interest in protecting this Sanctuary and they live together in total symbiotic relationship. The birds coming to their backyards for five generations are protected vehemently by villagers and regarded as harbingers of luck. The excreta of birds 'guano' is collected by villagers in summer along with silt to use as fertilizer in their fields. From children to grannies in the village, all protect them, their nests and fledgelings. Chicks fallen are taken care of in the rescue centre till they are able to fly on their own. Anybody troubling the nests are punished in their own methods of shaving the head, or making the procession on donkey.

Location



Flora

The Babul plantation of 30 ha. in Koonthakulam is the main breeding ground.

Fauna

More than 43 water birds, both resident and migratory are visiting every year regularly in the month of January/February and vacate in the month of July/August after nesting, hatching and nurturing the young ones. Many large water birds, especially Painted stork and Flamingos have been nesting annually around koonthankulam village over a long period . Accacia nilotica trees were grown in the tank foreshores by the Social Forestry Division of Forest Department and also in village trees.

The following migratory birds visit this area from different countries mentioned against them.

Barheaded Goose

Painted Stork

1.	Barheaded Goose	Siberia
2.	Pintail	Siberia
3.	Spotted Sand Piper	Siberia
4.	Green Sand Piper	Siberia
5.	Green Shank	Northern end of Siberia
6.	Coot	Central Siberia
7.	White stork	Germany
8.	Large flamingo	Partially from Germany
9.	Common Sand Piper	Lower part of Ladak
10.	Common Teal	Siberia

The following water birds also play an important role in occupying the trees in and around the Koonthankulam Sanctuary during January to August of every year from other parts of the country.

1. Dabchick or Little Grebe
2. Grey or Spottedbilled Pelican
3. Large Cormorant
4. Lesser Cormorant
5. Little Cormorant
6. Grey Heron
7. Purple Heron
8. Darter or Snake Bird
9. Large Egret
10. Pond Heron
11. Cattle Egret
12. Smaller or Medium Egret
13. Little Egret
14. Night Heron
15. Painted Stork
16. Openbill Stork
17. Small king fisher
18. White Ibis
19. Glossy Ibis
20. Spoonbill
21. Spotbill Duck
22. Cotton Teal or Pygmy Goose
23. Indian Moorhen
24. Purple Moorhen
25. Pheasant-tailed Jacana
26. Bronzewinged Jacana
27. Brahminy Kite
28. Whitebreasted Waterhen
29. Blackwinged Stilt
30. Redwattled Lapwing
31. Pied Kingfisher
32. Whitebreasted Kingfisher
33. Indian Pied Wagtail

The Birds which visit the sanctuary also go to the surrounding agriculture lands for feeding and return to the Sanctuary for the shelter and resting. It is understood that many of the birds that breed here, take sea fish from the Tamarabarani river estuary area near Punnakayal in the Gulf of Mannar, after travelling nearly 100 KM daily and they used to bring fish for feeding the young ones available in the nest.

Approach

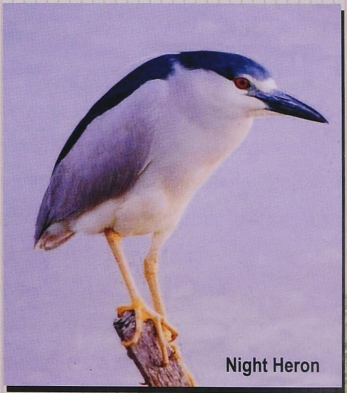
Road : Tirunelveli -- 35 KMs Nazareth -- 15 KMs

Railway : Tirunelveli -- 35 KMs

Airport : Madurai 200 KMs
Trivandrum -- 250 KMs

Tourist info

An Interpretation Centre is constructed. Tar road links the tank conveniently. A watch tower is constructed. A Childerns Park is created. A Dormitary is constructed.



Night Heron

Vallanadu is the southernmost place in India where a natural population of Blackbuck exists. The Vallanadu Blackbuck Sanctuary is an isolated hillock with scrub forest in Toothukudi Revenue District situated on eastern side of Tirunelveli - Tuticorin highway. A learned man would immediately think how would the Blackbuck, dweller of plains ended up in hillock. The whole plain area of Tamilnadu used to have large number of Blackbucks in the 19th century. The developmental pressures, poaching and agriculture has cornered them to four places now Guindy National Park in Chennai; Mudumalai Sanctuary near Masinagudi; Point Calimere Sanctuary in Nagapattinam; and Vallanadu in Tuticorin.

Location

The Sanctuary is located in Vallanadu Village of Srivaikundam Taluk of Thoothukudi District in Tamil Nadu at Tirunelveli Thoothukudi road at the distance of 16 KM away from Tirunelveli Town.

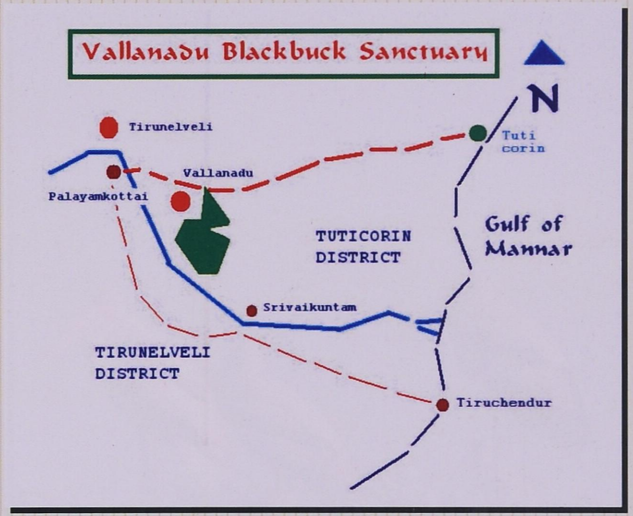
Latitude 8°39'45" North to 8°44'00" North

Longitude 77°54'45" East to 77°57'10" East

Flora

The forest type available here in the Sanctuary area is 6A/DSI that is Southern Thorn Scrub. The species composition as furnished below is mostly of thorny hardwood and xerophytes.

Dalbergia multiflora, Dichrostachys cinerea, Acacia latronum, Acacia planifrons, Albizia amara, Zizyphus Species and a few Azadirachta indica, Dodonia viscosa, Carissa carandus, Pterolobium indicum and Euphorbia Acalypha fruticosa, Ocimum sanctum, species form the under growth.



Fauna

Black buck, Monkeys, Wild cat, Mongoose, Black naped Hare, Scaly Ant eater- Pangolin, Viper, Rat snake, Peacock, Heron, Stork, Grey partridges, Jungle Craws, Common quails, Pied crested cuckoo, Crested hawk eagle, Black winged kite, Curlew, Lapwing, Nightjar, Sparrows, Horned owl,and other nearly 100 other species of birds are found in the area.

The Blackbuck population is 20-40. The thick Acacia growth makes it difficult to assess the exact numbers. The Blackbucks have regular habit of coming out of the scrubs and graze in wastelands on the eastern side of the the Sanctuary.

Painted Stork

Approach

Nearest Airport	Tuticorin District	25 KM
Nearest Railway Station	Tirunelveli	16 KM
By Road	Tirunelveli	16 KM
	Tuticorin	38 KM

Tourist info

The climate is hot throughout the year. The rainfall and rainy days are very less. The area is bushy and not very accessible. The Blackbuck can be seen around only during early morning and late evening hours at specified advantage points.Watch tower and temporary shelters are available in the Sanctuary.

Accommodation

The important town in the vicinity of the Sanctuary is Tirunelveli, which has hotel accommodation etc. Frequent bus and taxi services are also available from Thoothukudi to Tirunelveli. Government Circuit House is available at Tirunelveli and Thoothukudi. Tamil Nadu Tourist House also available at Tirunelveli and Thoothukudi.

Contact:
District Forest Officer
Collectorate complex, Tirunelveli-8. Ph:04622500778

Vellode Birds Sanctuary of Erode District of Tamil nadu, has an area of 77.185 ha. Comprising of 75.935 ha of Periyakulam Yeri and 1.250 ha of Odai poramboke in SF No.503 in Vadamugam Vellode village.

Location

Vellode Birds Sanctuary is situated in Vadamugam Vellode Village, Erode District of Tamil nadu. It is located about 12 KM from Erode, along Chennimalai main road. March to June are the hottest months in this area. The average maximum temperature is about 30C and the average minimum temperature is about 19C. During the peak summer the maximum temperature often reaches 38C.

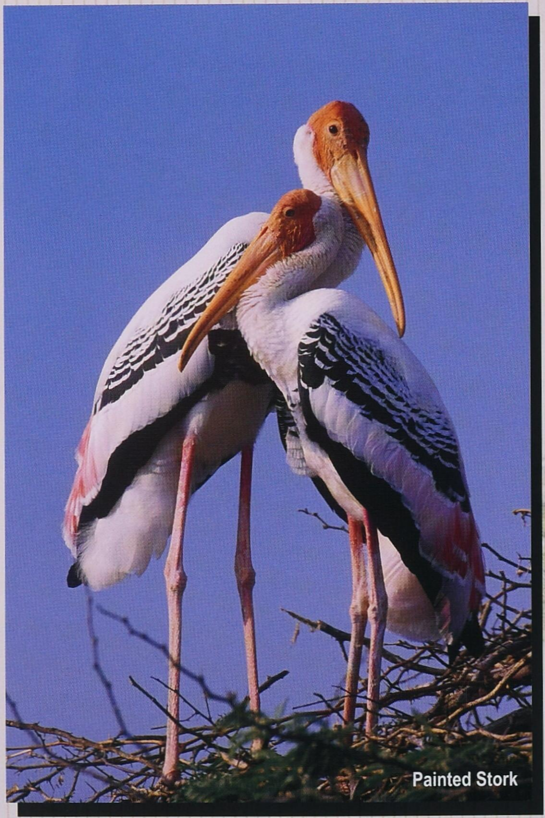
This area receives rainfall mainly from the North east monsoon between September to December, Whereas the period February to June generally remains dry.

Flora

The Vellode Birds Sanctuary is a storage tank and as such there are no forests in this tank. The main vegetation of the Sanctuary consists of Acacia nilotica plantation. The other tree species present in the Sanctuary includes Azadirachta indica, Palmyra and Eucalyptus plantation all along the bund and profuse growth of Prosopis juliflora.

Fauna

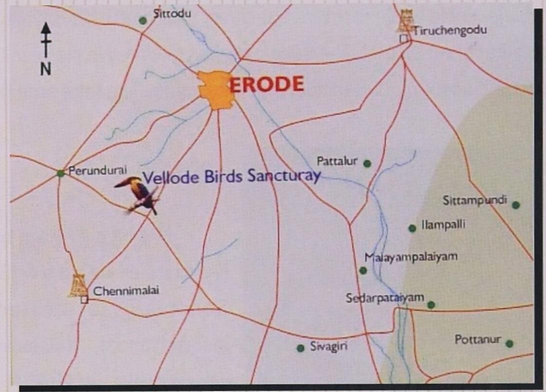
The Vellode Birds Sanctuary is visited by large number of resident and migratory bird species. The migratory birds start arriving to the Sanctuary at the onset of the Northeast monsoon. The Sanctuary become an ideal habitat for the birds, because of the availability of abundant feed in the tank and in the neighbouring agricultural fields and plenty of trees for perching and nesting. There are abundant fish and other aquatic organism present in the tank, which form part of food for many resident birds.



Painted Stork

Approach

This Sanctuary is situated 12 KM away from Erode toward Chennimalai main road and is easily accessible by road Erode is 12 KM and Chennimalai is 14 KM. ON Erode-Chennimalai road from Mettupalayam, a diversion road towards North to a distance of1 km takes you to this Sanctuary.



Tourist info

Facilities available

For the benefit of the visitors, a watch tower is constructed. A tourist canteen building was also constructed to cater the needs of the visitors. An interpretation center was also constructed for creating awareness among the visitors especially to the student visiting the sanctuary.

No entry fee is colleted from the visitors.

The vehicles of the visitors are restricted at the entry point itself so as to observe silence in Sanctuary which is required for the perching birds.

Tourist can approach the staff and make use of facilities like binoculars.

For furthur information contact :

District Forest Officer

Roja nagar, ERODE-4. Ph:0424-2291722

Mela-Keela Selvanoor Bird Sanctuary is located near Sayalkudi in Ramanathapuram District. The Sanctuary was declared in the year 1998. This is the biggest birds Sanctuary in Tamil nadu. The total area of the Sanctuary is 593.08 ha

Cattle Egret in breeding plumage

Location

Melaselvanoor, Keelaselvanoor Bird Sanctuary is located in Melaselvanoor, Kelaselvanor village tanks at 9°13' N and 78° 32'30 E graticule. It forms part of Melaselvanoor and Keelaselvanoor Villages of Kadaladi Taluk of Ramanathapuram District.

Flora

Majority of its area is now invaded and covered with Prospis thickets. The Acacia nilotica plantation situated in the area is the nesting site for Migratory birds.

Fauna

Pelicans, Painted Storks, Open billed Storks, White ibis, Spoon bills and Egrets regularly nest in the Sanctuary. This Sanctuary is considered to be the best heronry site in Ramanathapuram District. The vegetation of the tank is dominated by Prosopis in few locations with Babul and on the boundaries with tamarind trees.

Approach

The Sanctuary is only approachable by road and is 130 KMs. away from Madurai. The nearest towns are Sayalkudi (12 KM.), Kadaladi (15 KM.), Mudukulathur (27 KM.) & Ramanathapuram (45 KM.).

The nearest raialway station is Ramanathapuram (45 KM.).

The nearest Air port is in Madurai.

Accomodation

The boarding and lodging facilities are available at Sayalkudi (12 KM.), Ramanathapuram (45 KM.) and Paramakudi (52 KM.).

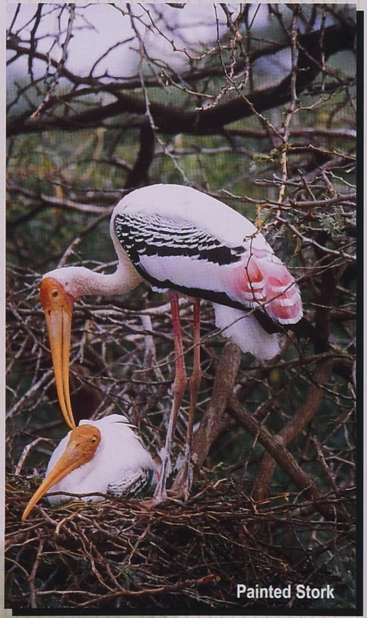
For furthur information Contact:

Wild life warden
Gulf of Mannar biosphere reserve
Mandapam, Ramanathapuram.
Phone:04567-230079

The Bird Sanctuary was declared in the year 1989, with an estimated area of 66.66 ha. in Keela Kanjirankulam and 37.55 ha. in Mela Kanjirankulam The sanctuary area is within the community tank embankments and its immediate water holding channel, measuring approximately 15 metre from the bottom of the embankment. Most notable feature of the sanctuary area is the prominent growth of Babul (Acacia nilotica) trees

Location

Kanjirankulam Bird Sacntuary, also known as Kanjirankulam Kanmoi, is located at 9°21' N and 78°30' E longitude. It is part of Kanjirunkulam village of Mudukulathur Taluk, Ramanathapuram District.



Painted Stork

Flora

The Sanctuary vegetation can be classified generally as that of Tropical Dry Deciduous type. It is dominated by Babul (Acacia nilotica) along with Prosopis juliflora and grasses such as Cynodon dactylon and Eremopogan faveolatus. Prosopis is slowly encroaching large extent of the sanctuary area and is retarding the growth of Babuls. The tank bund and the area outside the tank are having Tamarindus indica, Ficus Spp., Neem, (Azadirachta indica), Thespesia Populnea, Albizzia amara, Moringa oleifera and Palmyra (Borassus flabellifer).

Fauna

The Sanctuary offers ideal habitat for winter migratory birds with considerable diversity in nesting and feeding behaviours. It is one of the preferred nesting sites for heronry species a colonial bird migrating to South India. The feathered visitors flock the sanctuary from October to February. The wetland is irregular in depth and retains water for 3 to 5 months if rain is normal. The bird sanctuaries receive nearly 170 species of birds. Breeding population consists of Painted stork, White Ibis, Black ibis, Little egret, Large egret.

Approach

By road	:	Mudukalathur - 8 KMs
		Madurai 117 KMs
Railway	:	Paramakudi 15 KMs
Airport	:	Madurai

Tourist info

Accommodation

PWD Rest House at Mudukalathur 7 KM

Forest Rest House at Sayalgudi 30 KM Paramakudi

For further information Contact:

Wildlife Warden

Gulf of Mannar Biosphere Reserve

Mandapam, Ramanathapuram. Phone:04567-230079

Grey Heron

The Sanctuary is encompassing Periya Kollukudi Patti, Chinna Kollukudi Patti and Vettangudi Patti tanks extending to a total area of 38.4 ha. The only bird Sanctuary located in the Sivaganga District was declared as Sanctuary in June 1977.

Location

The Vettangudi Bird Sanctuary is located at a distance of 51 KM from Madurai on Madurai Melur-Tiruppathur road, in Sivagangai District. The Vettangudi Bird Sanctuary is located at 10 deg 10' N latitude and 78 deg 20' E longitude. It is located in Vettangudi patti & Periya Kollukudi Patti Village of Tiruppathur Taluk, Sivagangai District.

Flora

The vegetation of the tank is dominated by Prosopis, in a few locations with babul and on the bund with Tamarind.

Fauna

This is considered to be the natural breeding habitat for winter Migratory birds such as Open billed stork, White ibis, Grey herons, Night herons, Darters and Spoon bills.

Approach

The Sanctuary is approachable by road. It is located 51 KMs. from Madurai on Madurai Melur - Tirupathur road. Nearest Railway Stations are Karaikudi (32 KM). and Madurai (51 KM). The nearest Airport is Madurai.

Accomodation

The nearest Accommodation is available in Karaikudi, Tirupathur and Madurai.

For further information Contact:
Wildlife Warden
Gulf of Mannar Biosphere Reserve
Mandapam, Ramanathapuram. Phone:04567-230079

Crane

Community participation and public support is crucial for any conservation effort to succeed. Amendments to the Wildlife Protection Act in 2003, provided for a machanism to provide recognition and legal backing to the community initiated efforts in wildlife protection. It provides for a flexible system wherein the wildlie conservation is achieve without compromising the community needs. *Tiruppadaimarathur Consertvation Reserve* is one such effort of the village community which came forward to protect the birds nesting in their village and acted for declaration as Conservation Reserve. This is the First Conservation Reserve to be established in the Country and was decalared by Government of Tamil Nadu in G.O.Ms.No.17 Environment and Forests Dept. dt. 14.02.2005. Now the village community and Forest Department manage the area.

Location

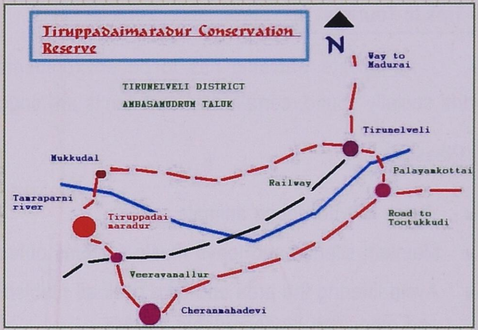
In Tiruppadaimaradur a Temple in the village having a compound covering around 2.84 Ha. Within which the nesting area is located. The village is adjacent to Tamiraparani River.

Flora

Around the temple, 20 huge, century old trees of *Terminalia arjuna*, *Basillus latifolia*, Neem, Maruthu and Illuppai are available and they constitute the best nesting site for birds.

Fauna

At present Little Egretts, Pond heron and Painted Stork are nesting and their numbers are around 120 and 300 respectively. Spot billed pelicans are also coming for refuge but are not nesting. Pond heron and egrets are nesting in backyards of few houses also while Painted storks are around the temple only.



Adjacent to the temple, Tamiraparani river flows and the surrounding area is having a few ponds and agricultural fields and all these provide food (fish) for the birds. The area is adjacent to the Kalakad Mundanthurai Tiger Reserve by 10 KMs. Birds are visiting for the past 5-6 years and the number is gradually increasing. The villagers are interested in protecting and are nursing and feeding the orphaned birds.

Eco commandments in protected area:

Entry into the Sanctuary is with permission during the specified hours only. Wildlife sighting is a matter of chance. Inform of all sightings and appreciate the habitat also. Wear dark clothes so as to be inconspicuous and merge with the surroundings. Maintain absolute silence during van and elephant rides for better sighting. Do not kindle fire in the forest and avoid smoking while in the sanctuary. Entry on foot, camp fires, music, cooking, littering in the sanctuary is prohibited. Do not get down from the vehicle. Use of spot lights, fast driving, blowing of horn etc., are prohibited. Bathing, washing and fishing in the river is prohibited. Consumption of alcoholic drinks and carrying of arms in the sanctuary are strictly prohibited. Disposable plastic bags, cups, plates, PET bottles are banned. Kindly do not use them.

Tips to Tourists

As wildlife watching has to be environmentally, economically and socially sound, certain do's and don'ts are suggested to tourists.

Please do

- Watch but not touch animals.
- Maintain silence and leave music systems outside
- Avoid littering the area and take back all rubbish specially plastics and other non biodegradable articles.
- Keep distance from birds, and do not disturb them.
- Leave behind pets, firearms, cigarettes and alcoholic drinks before entering the sanctuary.
- Report any unusual or important observations and give suggestions for improvement.
- Make sure that you have obtained an entry permit.
- Wear dark or neutral toned clothes, like green, grey, pale yellow to blend with the surroundings.
- Try and secure the services of a local guide to take you around the sanctuary.
- Carry and use a field guide book on birds.
- Keep a note book record anything interesting.
- Carry water bottle, binoculars and a camera loaded with fast film.
- If you are using a vehicle, ensure it is reliable and quiet.
- Park your vehicle at proper place.

Please do not

- Carry fire-arms.
- Use radios and musical equipments.
- Fish or swim in lakes.
- Shout at, harass, feed or chase birds.
- Throw garbage of any description like bottles, film-wrappers, cigarette packets, plastic bags etc. in the sanctuary into lakes. They deface and pollute nature.
- Drive fast and noisily.
- Pick up dead wood, chopwood or pick flowers from surroundings.
- Talk loudly while viewing wildlife; silence will enable you appreciate bird life and behaviour.
- Throw away cigarette buds and matches in the sanctuary, because they cause fires.

More Tips

- Know about weather forecast.
- Select the route and distance depending upon your ability and stamina.
- Never light your cigarettes or match box.
- Be silent. Loud talks disrupt animals.
- Keep the surroundings clean, particularly the camp sites.
- Don't collect any specimens of flora without permission.
- Look out for sign and information boards enroute.
- Be alert and avoid going near carnivores and sloth bears.
- Be careful on sight of lonely tuskers. In case of a chase, run down the hills.
- Never tease animals.
- Observe up and down so that you will not miss arboreal animals, beautiful birds and reptiles.
- Adhere to Rules and Regulations.
- Keep your sense alert for hearing and smell.

Tamil Nadu Forest Department
Panagal Building, Saidapet,
Chennai - 600 015.